



Form GSOP 1-PIN (04/98)

STATE OF CALIFORNIA
Department of General Services - Office of Procurement
PURCHASE ORDER

Page 1

Purchase Order No. Rev. Date
62398 6/30/2009

Supplier No. 814869	Solicitation No. 57303	Delivery Date 300 Days ARO	FOB Point Destination	Invoice Terms
S DEPT OF TRANSPORTATION h T CALTRANS EQUIPMENT SERVICE i o 1920 - 35TH STREET P SACRAMENTO, CA 95816 Attn: EQUIPMENT RECEIVING		C CALTRANS-ACCTG/OFC B-15 h T EQUIPMENT RECEIVING a T PO BOX 160048 r o SACRAMENTO, CA 95816 g e		
Agency Billing 60063	Agency Purchase Estimate 32-12-5414*	Purchase Estimate 67340	Revision 0	
Agency Contact STANLEY JACOBS		Phone 916-227-9710	Date Received	

TIME MANUFACTURING
7601 IMPERIAL DRIVE
WACO, TX 76702
Attn: STAN TOMCHESSON

Phone: 254-399-2167

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
----------	----------	------	----------------	-------------	------------	-----------

This purchase order is being awarded on AUGUST 27, 2009 pursuant to Government Code Section 13332.17. Any encumbrances made pursuant to this purchase order shall be construed to have been made on the last day of the preceding fiscal year.

The general provisions for Non-IT commodities are hereby incorporated by reference. These General Provisions can be obtained by phoning (916) 375-4400 or by accessing our website at:

www.documents.dgs.ca.gov/pd/modellang/GPnonIT0407.pdf

The following information is provided for agency use only:

Prime Contractor: NS/Sub Contracting 25% to SB

DELIVER:

1	1	EA	2590-259-0101-7	HOIST PERSONNEL	87,632.0000	87,632.00
A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.						

Breakdown of Unit Price

Base Price (No Options)	\$ 71,177.00
Option 1: Diesel Engine	\$ 5,301.00
Option 2: Engine Generator	\$ 7,214.00
Option 7: Cable Reel	\$ 3,940.00

Ship to Caltrans Shop 21
1650 Albee Street
Eureka, Ca 95501

Maint. Class	ID No.	EBR No./Shop
01382	7004224	7004224/21

Training is required at the Ship To location as specified.

Sales and/or use tax to be extra unless noted above

Buyer SHANNON KELLER	Phone 916-375-4606	BOC Number
-----------------------------	-----------------------	------------

Department of General Services - Office of Procurement

Page 2

Form GSOP 2-PIN (04/98)

<i>Purchase Order No.</i>	<i>Revision</i>	<i>Date</i>	<i>Supplier No.</i>	<i>Supplier Name</i>
62398		6/30/2009	814869	TIME MANUFACTURING

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
2	1	EA	2590-259-0101-7	HOIST PERSONNEL	96,422.0000	96,422.00
				A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.		
				<u>BREAKDOWN OF UNIT PRICE</u>		
				Base Price (No Options)	\$ 70,983.00	
				Option 1: Diesel Engine	\$ 5,301.00	
				Option 2: Engine Generator	\$ 7,214.00	
				Option 4: Four Wheel Drive	\$ 5,107.00	
				Option 5: Fiberglass Platform	\$ -1,400.00	
				Option 7: Cable Reel	\$ 3,940.00	
				Option 10: Power Windows	\$ 685.00	
				Option 12: Extended Cab	\$ 4,592.00	
				Ship to Caltrans Shop 22 1430 George Drive Redding, Ca 96003		
				<u>Maint. Class</u> <u>ID No.</u> <u>EBR No./Shop</u>		
				01382 7004787 7004787/22		
				Training is required at the Ship To location as specified..		
3	1	EA	2590-259-0101-7	HOIST PERSONNEL	81,965.0000	81,965.00
				A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.		
				<u>BREAKDOWN OF UNIT PRICE</u>		
				Base Price (No Options)	\$ 72,117.00	
				Option 1: Diesel Engine	\$ 5,301.00	
				Option 3: 1.8 KW Inverter	\$ 1,322.00	
				Option 5: Fiberglass Platform	\$ -1,400.00	
				Option 7: Cable Reel	\$ 3,940.00	
				Option 10: Power Windows	\$ 685.00	
				Ship to Caltrans Shop 23 981 North Beal Road Marysville Road, Ca 95901		
				<u>Maint. Class</u> <u>ID No.</u> <u>EBR No./Shop</u>		
				01382 7005079 7005079/23		
				Training is required at the Ship To location as specified.		

Department of General Services - Office of Procurement

Page 3

Form GSOP 2-PIN (04/98)

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension									
4	2	EA	2590-259-0101-7	HOIST PERSONNEL	85,898.0000	171,796.00									
A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.															
<u>BREAKDOWN OF UNIT PRICE</u>															
Base Price (No Options)				\$ 70,843.00											
Option 1: Diesel Engine				\$ 5,301.00											
Option 2: Engine Generator				\$ 7,214.00											
Option 5: Fiberglass Platform				\$ -1,400.00											
Option 7: Cable Reel				\$ 3,940.00											
Ship to Caltrans Shop 24 1993 Marina Blvd. San Leandro, Ca 94577															
<table><tr><td><u>Maint. Class</u></td><td><u>ID No.</u></td><td><u>EBR No./Shop</u></td></tr><tr><td>01382</td><td>7004425</td><td>7004425/24</td></tr><tr><td>01382</td><td>7006305</td><td>7006305/24</td></tr></table>							<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>	01382	7004425	7004425/24	01382	7006305	7006305/24
<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>													
01382	7004425	7004425/24													
01382	7006305	7006305/24													
Training is required at the Ship To location as specified.															
5	1	EA	2590-259-0101-7	HOIST PERSONNEL	87,026.0000	87,026.00									
A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.															
<u>BREAKDOWN OF UNIT PRICE</u>															
Base Price (No Options)				\$ 70,571.00											
Option 1: Diesel Engine				\$ 5,301.00											
Option 2: Engine Generator				\$ 7,214.00											
Option 7: Cable Reel				\$ 3,940.00											
Ship to Caltrans Shop 25 66 Madonna Road San Luis Obispo, Ca 93401															
<table><tr><td><u>Maint. Class</u></td><td><u>ID No.</u></td><td><u>EBR No./Shop</u></td></tr><tr><td>01382</td><td>7004035</td><td>7004035/25</td></tr></table>							<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>	01382	7004035	7004035/25			
<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>													
01382	7004035	7004035/25													
Training is required at the Ship To location as specified.															

Department of General Services - Office of Procurement

Page 4

Form GSOP 2-PIN (04/98)

<i>Purchase Order No.</i>	<i>Revision</i>	<i>Date</i>	<i>Supplier No.</i>	<i>Supplier Name</i>
62398		6/30/2009	814869	TIME MANUFACTURING

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
6	6	EA	2590-259-0101-7	HOIST PERSONNEL	85,676.0000	514,056.00
<p>A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.</p>						
<u>BREAKDOWN OF UNIT PRICE</u>						
Base Price (No Options)				\$ 70,621.00		
Option 1: Diesel Engine				\$ 5,301.00		
Option 2: Engine Generator				\$ 7,214.00		
Option 5: Fiberglass Platform				\$ -1,400.00		
Option 7: Cable Reel				\$ 3,940.00		
<p>Ship to Caltrans Shop 26 1385 North West Avenue Fresno, Ca 93728</p>						
<u>Maint. Class</u>		<u>ID No.</u>	<u>EBR No./Shop</u>			
01382		7005258	7005258/26			
01382		7005261	7005261/26			
01382		7005262	7005262/26			
03182		7005790	7005790/26			
03182		7005791	7005791/26			
03182		7005792	7005792/26			
<p>Training is required at the Ship To location as specified.</p>						
7	1	EA	2590-259-0101-7	HOIST PERSONNEL	87,541.0000	87,541.00
<p>A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.</p>						
<u>BREAKDOWN OF UNIT PRICE</u>						
Base Price (No Options)				\$ 70,631.00		
Option 1: Diesel Engine				\$ 5,301.00		
Option 2: Engine Generator				\$ 7,214.00		
Option 7: Cable Reel				\$ 3,940.00		
Option 11: Battery Jack				\$ 455.00		
<p>Ship to Caltrans Shop 26 1385 North West Avenue Fresno, Ca 93728</p>						
<u>Maint. Class</u>		<u>ID No.</u>	<u>EBR No./Shop</u>			
01382		7003924	7003924/26			
<p>Training is required at the Ship To location as specified.</p>						

Department of General Services - Office of Procurement

Page 5

Form GSOP 2-PIN (04/98)

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension																		
8	5	EA	2590-259-0101-7	HOIST PERSONNEL	80,150.0000	400,750.00																		
A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.																								
<u>BREAKDOWN OF UNIT PRICE</u>																								
Base Price (No Options)				\$ 70,396.00																				
Option 2: Engine Generator				\$ 7,214.00																				
Option 5: Fiberglass Platform				\$ -1,400.00																				
Option 7: Cable Reel				\$ 3,940.00																				
Ship to Caltrans Shop 27 13204 Golden State Road Sylmar, Ca 91342																								
<table><tr><td><u>Maint. Class</u></td><td><u>ID No.</u></td><td><u>EBR No./Shop</u></td></tr><tr><td>01282</td><td>7004076</td><td>7004076/27</td></tr><tr><td>01282</td><td>7004077</td><td>7004077/27</td></tr><tr><td>01282</td><td>7004082</td><td>7004082/27</td></tr><tr><td>01282</td><td>7004083</td><td>7004083/27</td></tr><tr><td>01282</td><td>7005382</td><td>7005382/27</td></tr></table>							<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>	01282	7004076	7004076/27	01282	7004077	7004077/27	01282	7004082	7004082/27	01282	7004083	7004083/27	01282	7005382	7005382/27
<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>																						
01282	7004076	7004076/27																						
01282	7004077	7004077/27																						
01282	7004082	7004082/27																						
01282	7004083	7004083/27																						
01282	7005382	7005382/27																						
Training is required at the Ship To location as specified.																								
9	2	EA	2590-259-0101-7	HOIST PERSONNEL	76,824.0000	153,648.00																		
A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.																								
<u>BREAKDOWN OF UNIT PRICE</u>																								
Base Price (No Options)				\$ 71,562.00																				
Option 3: 1.8 KW Inverter				\$ 1,322.00																				
Option 7: Cable Reel				\$ 3,940.00																				
Ship to Caltrans Shop 27 13204 Golden State Road Sylmar, Ca 91342																								
<table><tr><td><u>Maint. Class</u></td><td><u>ID No.</u></td><td><u>EBR No./Shop</u></td></tr><tr><td>01282</td><td>7005385</td><td>7005385/27</td></tr><tr><td>01282</td><td>7005388</td><td>7005388/27</td></tr></table>							<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>	01282	7005385	7005385/27	01282	7005388	7005388/27									
<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>																						
01282	7005385	7005385/27																						
01282	7005388	7005388/27																						
Training is required at the Ship To location as specified.																								

STATE OF CALIFORNIA

Department of General Services - Office of Procurement

PURCHASE ORDER CONTINUATION

Form GSOP 2-PIN (04/98)

Page 6 (Last)

Purchase Order No.	Revision	Date	Supplier No.	Supplier Name
62398		6/30/2009	814869	TIME MANUFACTURING

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension									
10	2	EA	2590-259-0101-7	HOIST PERSONNEL A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.	81,459.0000	162,918.00									
<u>BREAKDOWN OF UNIT PRICE</u>															
Base Price (No Options)				<u>\$ 70,305.00</u>											
Option 2: Engine Generator				<u>\$ 7,214.00</u>											
Option 7: Cable Reel				<u>\$ 3,940.00</u>											
Ship to Caltrans Shop 28 320 South Sierra Way San Bernadino, Ca 92408															
<table><tr><td><u>Maint. Class</u></td><td><u>ID No.</u></td><td><u>EBR No./Shop</u></td></tr><tr><td>01282</td><td>7004255</td><td>7004255/28</td></tr><tr><td>01282</td><td>7004969</td><td>7004969/28</td></tr></table>							<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>	01282	7004255	7004255/28	01282	7004969	7004969/28
<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>													
01282	7004255	7004255/28													
01282	7004969	7004969/28													
Training is required at the Ship To location as specified.															
11	1	EA	2590-259-0101-7	HOIST PERSONNEL A truck mounted 35-foot telescopic personnel hoist, utility body and equipment, to be supplied in accordance with Specification 01282-128-082 with the options listed below.	85,531.0000	85,531.00									
<u>BREAKDOWN OF UNIT PRICE</u>															
Base Price (No Options)				<u>\$ 70,476.00</u>											
Option 1: Diesel Engine				<u>\$ 5,301.00</u>											
Option 2: Engine Generator				<u>\$ 7,214.00</u>											
Option 5: Fiberglass Platform				<u>\$ -1,400.00</u>											
Option 7: Cable Reel				<u>\$ 3,940.00</u>											
Ship to Caltrans Shop 31 7179 Opportunity Road San Diego, Ca 92111															
<table><tr><td><u>Maint. Class</u></td><td><u>ID No.</u></td><td><u>EBR No./Shop</u></td></tr><tr><td>01382</td><td>7004890</td><td>7004890/31</td></tr></table>							<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>	01382	7004890	7004890/31			
<u>Maint. Class</u>	<u>ID No.</u>	<u>EBR No./Shop</u>													
01382	7004890	7004890/31													
Training is required at the Ship To location as specified.															
Total Value:						1,929,285.00									

State of California – DGS Procurement Division
Purchase Order 62398

FOR THE PURPOSE OF THIS AWARD

Only Free On Board (F.O.B.) Destination will be accepted.

DELIVERY

Delivery is to be completed in full within three hundred (300) days after receipt of order (ARO).

Note: In accordance with paragraph 15 of the General Provisions entitled "Delivery", the contractor shall strictly adhere to the delivery terms and completion schedule as specified in this solicitation. Failure to comply with the delivery requirements, as stated, may be considered a breach of contract and subject the contractor to General Provisions 26, entitled "Rights and Remedies of the State for Default".

FEDERAL EXCISE TAX EXEMPT CERTIFICATE ATTACHED

Federal Excise Tax Exemption Certificate attached.

SALES TAX

Sales tax was not included in the bid pricing and is not part of this award. Sales tax should be added at time of invoicing. The sales tax rate applied should be based on the rate of the area the product is to be delivered to.

PURCHASE ORDER CHANGES

This Purchase Order may be amended, modified, or terminated at any time by mutual agreement of the parties, in writing. Change orders amending, modifying or terminating the Purchase Order, including any modifications of the compensation payable, may be issued only by the State Procurement Officer. All such change orders shall be in writing and issued only upon written concurrence of the supplier. Termination, as that term is used in this section, does not include termination for default of the supplier.

SCPRS

This Purchase order has been registered into the State Contract and Procurement Registration System (SCPRS) at (<https://www.scprs.dgs.ca.gov/>). The registration number is _____.

STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION
DIVISION OF EQUIPMENT

ITEM NO.	UNIT	CAB	TRANS	ENG	CAP	C.A.	F.A.	R.A.
01282	EA.	C	A-5	G-300	17.95	60	7.0	13.5

SPECIFICATION NUMBER: 01282-128-083

SPECIFICATIONS FOR: A TRUCK MOUNTED 35-FOOT TELESCOPIC PERSONNEL
HOIST, ELECTRICAL UTILITY BODY AND EQUIPMENT

PURCHASE ESTIMATE NUMBER: 32-12-5414**

It is the intent of this specification to describe the minimum requirements for a truck mounted hydraulic, articulating, telescopic-boom, non-insulated aerial device, body, and all other miscellaneous equipment. The unit shall consist of an elevating, hydraulically powered, telescopic-boom, rotating on a fixed pedestal with a single, one-person, side mounted, steel constructed platform. The hoist pedestal shall be mounted with center of rotation forward of the rear axle and the lower boom stowed over the cab. The aerial device and body shall be mounted on a minimum, 17,950 GVW, 4x2, conventional truck cab and chassis. The aerial device and mounting shall meet or exceed all sections of the most current ANSI Standard A92.2 and certified to meet ISO 9001 requirements. The finished equipment including the hoist, truck, body and optional equipment shall have a minimum payload of 4,500 lbs. without exceeding the capacity of either axle.

Size dimensions and specified equipment may vary a nominal amount in accordance with industry standards. The acceptable variance shall be determined and approved by Caltrans Division of Equipment, Specifications Engineer. Only technical changes authorized by the Specification Engineer in writing will be accepted. Technical changes made by any other employee will not be accepted.

The unit shall comply with Caltrans Equipment Quality Standards for Electrical, Welding, paint and coatings as defined at: <http://www.dot.ca.gov/hq/eqsc/qualstand.htm>.

A post-award meeting shall be conducted at the California Department of Transportation, Division of Equipment Headquarters office located at 34th Street and Stockton Blvd., Sacramento, CA 95816 with the successful vendor and pertinent Department of Transportation personnel following award of bid. The meeting will consist of an outline of the successful vendor's time line for manufacturing the body, miscellaneous components and assembly schedule for a complete truck. Additionally, the vendor shall be required to provide a factory approved weight study for the proposed cab chassis, hoist, body and all components prior to the post-award meeting. The study shall list the GVWR, GCWR, available payload and the weight on each axle.

TECHNICAL SPECIFICATIONS

The written specifications shall take precedence over the drawings. The 35-Foot Personnel Hoist shall be fabricated and installed in accordance with this specification and the following State of California, Department of Transportation, Division of Equipment Drawings:

E2-D117-01	Spare Tire Bracket
E2-D254-01	Sign Tube Single, 6" Diameter
E2-D259-01	Rear Bumpers, Personnel Lift
E2-D260-01	Step Bumper Mod, Vice Bracket & Installation
E2-D281-01	6-Inch Sign Tube mounting Plate
E2-D282-03	Utility Body Lower Isolation Mount
E2-D283-01	Utility Body Urethane Isolation Mount, GVWR Greater than 9,200 lbs, (6 Mounts)
I-01282-01	Personnel Hoist, 35 Foot
I-01282-02	Personnel Hoist, 35 Foot 35-Foot Level 3 Light Option.
I-01282-DE	Personnel Hoist Decals & Striping
I-08-01282-FD-ES1	Personnel Hoist 35 Foot, Ford F550, 2008 No Console, w/Radio Electrical Schematic
I-08-01282-FD-ES2	Personnel Hoist 35 Foot, Ford F550, 2008 Fuse Bracket
P2-D075-01	Personnel Hoist Light Rack
U1-D022-01	1800 Watt Inverter with/GFIC and One 4D AGM Battery, Schematic.
U1-D022-02	Inverter and AGM Battery Vehicle Installation Details
U1-D028-01	Cabinet Lights.
U1-D034-01	6 Position Fuse Block Modification

CALTRANS SUPPLIED PARTS SHEETS

<u>Equip ID</u>	<u>Maint. Class</u>	<u>Equip ID</u>	<u>Maint. Class</u>	<u>Equip ID</u>	<u>Maint. Class</u>
7004224	01382	7005262	01382	7004255	01282
7004787	01382	7004076	01282	7004969	01282
7005079	01382	7004077	01282	7004890	01382
7004425	01382	7004082	01282	7005790	01382
7004035	01382	7004083	01282	7005791	01382
7003924	01382	7005382	01282	7005792	01382
7005258	01382	7005385	01282	7005870	01382
7005261	01382	7005388	01282	7006305	01382

CALTRANS SUPPLIED PARTS MATRIX

Project 07-8-01282 Personnel Hoist	Page 1 of 3
Project 07-8-01282 Personnel Hoist	Page 2 of 3
Project 07-8-01282 Personnel Hoist	Page 3 of 3

1. CAB AND CHASSIS: The cab and chassis shall be a conventional, regular cab, 4 x 2, with a gasoline powered engine and an automatic transmission; a 110 Amp alternator; limited slip differential; factory installed towing package; a minimum 40 gallon fuel capacity, and front tow hooks. The cab and chassis shall be supplied with a minimum 7,000 lb. front axle and a 13,500 lb rear axle. Seven (7) wheels (dual wheels) including a spare of the same brand, size, rating and appearance shall be furnished. Split rims are not acceptable. Wheels shall be 19.5 x 6-inch steel, with 225/70 R x 19.5 tires, minimum load range G. Tire capacity shall meet the axle capacity to which it is attached. The engine shall have a minimum SAE J1995 gross brake power rating of 325 horsepower (HP) and minimum gross torque rating of 450 lb.-ft. The transmission shall have a minimum of four forward and one reverse speed and provisions for a PTO. The cab shall be provided with: electronic speed control; a factory installed elevated idle controller; a multi-speed cab heater; tilt steering wheel; a windshield defroster, and a factory installed refrigerated air-conditioning integral with the heating unit. Driver and front passenger airbags a left and right hand rear view mirrors; AM/FM radio with, cloth seats, with head rests for the driver and the outboard passenger; and vinyl floor coverings shall be provided. (Ref. Ford F-550 or comparable). The capacity of the cab chassis shall be as follows:

- a. GVW: 17,500-lbs. minimum.
- b. Cab to Axle Distance (CA): 60 inches
- c. GAWR Front Axle: 6,500-lbs. minimum.
- d. GAWR Rear Axle: 13,500-lbs. minimum.

2. MOUNTING: The hoist pedestal shall be centered between the truck frame rails and positioned ahead of the rear axle to give appropriate weight distribution between the axles as recommended by the manufacturer for stability on the vehicle(s) selected. The hoist pedestal subframe shall be mounted to the frame rails. The mounts shall be attached to the web of the truck frame rails with high strength bolts (Grade 5 or better) in accordance with the vehicle manufactures recommendations. The mounting shall not adversely affect the truck frame. If required, a partial frame glove may be fabricated and mounted to protect the frame from stress concentrations caused by notches or holes.

The body shall be mounted to the chassis at a minimum of three (3) points on each side. The front mount (adjacent to the cab) and the center mount shall be a polyurethane isolation mounts (Ref. Energy suspension Part No. 9.4103G), the mounts shall be attached to the web of the truck frame rails as shown on Drawings E2-D282-01 and E2-D282-05. The steel plate between the top and bottom mounts shall be a minimum of ¼' thick. The rear mount shall be shear plate mounted to the web of the truck frame rails. All mounts shall be attached to the frame with high strength bolts (Grade 8 or better) in accordance with the vehicle manufactures recommendations. There shall be a space of 2 to 4 inches between the front of the body and the back of the cab.

Drilling the frame flanges or the use of U-bolts shall not be permitted. Welding to the truck frame shall not be permitted within four inches in the rear of the rear suspension mounting attachments. If the frame is welded within four inches of the rear suspension mounting attachments, the attachments must be either retoured with new bolts or nuts (where bolts are used) or the rivets shall be removed and replaced with Grade 8 bolts according to the chassis manufacture's recommendations. Welded frame extensions shall glove the frame at least to the rearmost rivets on the frame or a minimum of four inches. All spacer materials used between truck frame, body and hoist subframe shall be steel. The body shall not be allowed to rest on the chassis rivets. Clearance for side gas tank, angled, recessed filling adapter shall be provided using the vehicle manufacturer body builder's guide.

3. HOISTS WEIGHT: The installed weight of the hoist, and platform, shall not exceed 2,600 lbs. including tie down, oil, and tank.
4. TRAVEL HEIGHT: The travel height of the completed unit shall not exceed 10-feet 9-inches.
5. HOISTS PERFORMANCE CHARACTERISTICS:
 - a. Height Extended: The distance from ground to bottom of platform with lift at its maximum vertical extension shall be not less than 35-feet at a minimum of at 8.0 feet from centerline of rotation.
 - b. Reach: The horizontal distance from centerline of rotation to outer edge of platform shall be not less than 25 feet.
 - c. Angle of Boom Elevation: The angle of elevation and de-elevation for the upper, telescoping boom shall be a minimum of 75° above horizontal and a minimum of 10° below horizontal.
 - d. Angle of Lower Boom Elevation: The angle of elevation and de-elevation for the lower, articulating lower boom shall be a minimum of 0° to 75° above horizontal.
 - e. Capacity: The platform capacity shall be minimum 400 lbs. in any position.
 - f. Rotation: Rotation shall be 360° noncontinuous. The stop or null point shall be at the rear of the vehicle.
6. LOWER BOOM: The lower boom shall be a tubular structure. The lower boom shall be located between the turntable and the lower boom. The lower boom shall have a single nonretractable section with pivots at each end.
7. BOOM: The boom shall have single, telescoping section. A lifting hook shall be attached to a pad eye welded to the upper end of the main boom. (Ref: Crosby/Laughlin hook, 1/2 ton capacity, no. S-3316 and a Crosby S-264 pad eye #2; Broadus Chain and Cable, (916) 485-2202. Use parts listed or equivalent). Decals

stating "400 lb. Capacity" and "Hook to be used with upper boom retracted and no personnel in basket" shall be affixed near the hook.

8. BOOM SUPPORT AND SECURING DEVICE: The boom support shall be equipped with a mechanical over-center locking or a cam lock device. The boom support shall have the capacity to carry the boom and platform while traveling. The hydraulic lift cylinder shall not support the boom in the stowed position. The boom support shall be anchored to the frame of the truck. The cradle of the boom support shall be padded. The boom support shall not interfere with rotation of the hoist pedestal.

A spring wire actuated microswitch with weatherproof enclosure shall be supplied and installed on the boom saddle and connected to the red warning light on the upfitter switches.

9. PLATFORM: One (1) platform of nominal size, approximately 24-inches x 24-inches x 42-inches deep, shall be curbside mounted (relative to the boom in the travel position) to the end of the boom. The platform shall be constructed of steel with an expanded metal floor. Access to the platform shall be from the passenger side, when the platform is in the stowed position.

The hoist platform shall be stowed on the driver's side of the rear tailshelf described in, Section 15 "Rear Tailshelf", when the truck is traveling. A shock-absorbing device shall be installed between the hoist platform and the tailshelf deck. Steps shall be supplied on the passenger side (not rear) of the tailshelf to allow safe access from the ground to the tailshelf deck where the hoist platform is stowed

The platform shall have Maximum Capacity 400 lbs. stenciled in two-inch high minimum letters on street and curbside of the toe board of the platform. The letters shall be visible from the ground when the platform is installed and operational.

The platform, by use of hydraulic cylinders, shall automatically maintain a positive level condition regardless of the boom angle. The hydraulic leveling lines shall be interior to the boom. The hydraulic platform leveling or stabilizing system shall have a hydraulic relief in case the boom is raised with the platform stowed.

A manufacturer's standard tool tray shall be supplied and designed to hang over the lip or the edge of the platform. Dimensions of the tool tray shall be approximately 19-inches x 6-inches x 7-inches

10. CONTROLS: There shall be a control station at; the platform and in the passenger side front vertical compartment. Controls shall provide multiple function, simultaneous operation. The platform control station shall include a single stick controller and shall be located on the outside front sill of platform. Movement of the stick shall be synchronized with the travel of the platform. The platform control shall have variable feathering qualities for precision positioning of the platform. The control station located in the front vertical compartment shall be attached to a minimum 25-Ft umbilical cord or a wireless remote control. Lower controls shall override upper

controls. The controls shall be designed to prevent feedback causing reversal of any function. Control shall be for the following functions:

- a. Boom rotation.
- b. Upper boom up and down.
- c. Upper boom in and out.
- d. Lower boom up and down.
- e. Engine Start/Stop.
- f. Emergency hydraulic power.
- g. Platform leveling

A hydraulic tilt control (bucket dump) shall be supplied and installed at the lower control panel to assist in the rescue of an operator in the event of an emergency.

The lower control station shall contain a manually actuated switch designed to lock out the platform controls. A manual release on check valves for lowering the boom and platform in the event of power failure shall be provided. The platform boom control shall be a single stick control.

All exterior controls shall be rated NEMA Type 4. Control lines to the platform shall be interior to the boom.

No key shall be required to provide electrical power to the exterior control. All power shall originate from a master truck/machine switch installed on the upfitter switches described in Section 18, "Upfitter switches."

No control, including control over emergency hydraulic power, shall require more than two (2) switches to operate.

11. ACTUATION: The unit shall utilize power hydraulic cylinders for elevation and outer boom extension with pilot operated valves. A hydraulic motor shall operate the rotational mechanism through gears. Cable or chain actuation is not acceptable.
12. HYDRAULIC SYSTEM: The hydraulic system shall be designed to produce the maximum pressure and flow required to operate the unit with a safety factor of four (4) using proper filtration, filter condition indicators, relief valves, and a reservoir as recommended by the manufacturer and as specified. The system components and plumbing shall maintain oil at manufacturers recommended operating temperature, pressure, flow rate, and purity.
 - a. Power: Hydraulic power shall be supplied by a transmission mounted PTO driven hydraulic pump (Ref: Muncie Model FA Series or comparable)
 - b. The pump shall have check valve protection from the emergency hydraulic pump described below.
 - c. Filters: The hydraulic system shall include a return line, spin-on filter of sufficient filtration, pressure and flow ratings to meet the hydraulic system

component manufacturer's recommendations. The filter shall be installed on a spin-on filter head with a bypass valve to prevent restriction of flow in the event that the filter becomes blocked. The filter head shall have a filter condition indicator, readily visible during a pre-operational check, to indicate when to replace the filter element. The filter shall be readily accessible for replacement and be replaceable without having to drain the hydraulic system. A valve shall be installed near the filter location to prevent loss of hydraulic fluid when changing the filter.

- d. Piping: Piping shall be sized in accordance to system component manufacturer's recommendations. The hydraulic fluid passages, including pressure and return lines, shall consist of stainless steel, steel hydraulic tubing, steel fittings, or braided steel flexible hose. The use of malleable iron, brass, galvanized iron, or plastic pipe or fittings shall **not** be used. All threads shall be North American type. Hydraulic fittings on pressure lines shall be crimp-on type either 37° JIC, SAE "O" Ring Boss, or SAE "O" Ring Flange. Hydraulic hoses shall be routed to clear exhaust and sharp edges.

NOTE: NPT fittings shall only be used to connect to the hydraulic reservoir.

- e. Reservoir: The reservoir shall be sized and placed adequately to supply oil to the hydraulic system as recommended by the system component manufacturer. The reservoir shall be easy to fill. The hydraulic reservoir shall be baffled, have a sight level, a filtered breather cap, a suction strainer, and drain. The suction line between the strainer and pump shall have a valve.
 - f. Emergency Hydraulic Power: Emergency hydraulic power shall be provided to operate the hoist if the main power source is inoperable. The emergency system shall consist of a 12VDC powered motor driven hydraulic pump with a momentary contact start switch labeled for emergency, and it shall have check valve protection from the main system pump. The emergency system shall be operable from both the platform and the lower control station. The emergency system shall be able to use main functions required to return the boom to the rest.
 - g. Overload Protection: Protection shall be provided by system relief valve, which will automatically protect the equipment from overloading. Means shall be provided to restore the system to normal operation in the event of an overload.
 - h. Diagnostic Pressure Test Port: A diagnostic pressure test port shall provide access for a technician to easily check the hydraulic system pressures.
13. REAR STABILIZER: A heavy-duty, over frame, torsion bar stabilizing device of adequate capacity shall be installed. There shall be no welding to the chassis frame and no holes drilled in the frame flange required to install the stabilizer. Complete operational stability of this unit shall be in accordance with ANSI standard A92.2 without the use of outriggers or ballast. The largest pivot point of the torsion bar

linkage shall have a rubber bushing or grease fitting with a bearing surface (Ref. Sauber Mfg. Model No. 8750-F5B, Turner Model No. 683-22053 or comparable).

14. FRONT STABILIZER: A heavy-duty, torsion bar stabilizing device of adequate capacity shall be installed. There shall be no welding to the chassis frame and no holes drilled in the frame flange required to install the stabilizer. Complete operational stability of this unit shall be in accordance with ANSI standard A92.2 without the use of outriggers or ballast. The largest pivot point of the torsion bar linkage shall have a rubber bushing or grease fitting with a bearing surface (Ref. Sauber Mfg. Model No. 8705-F9B, (Sauber Model No.8735-F1 or Turner Model No. FW-34007 for diesel engines), Turner Model No. FW-34010 or comparable).

15. REAR TAILSHELF: A rear-mounted tailshelf with rear bumper as shown on Caltrans Drawing I-01282-01 shall be supplied and installed. A heavy-duty channel rear bumper with a minimum 12-inch wide nonskid step shall be supplied. A vertical skirt shall connect bumper and tailshelf so that the rear bumper mounts at approximately the same height as the front bumper.

The center step section of the bumper shall be recessed to accept the pintle hook and allow full vertical movement of the trailer tongue, as shown on Caltrans Drawing E2-D259-01.

Means shall be provided for safe access to the tailshelf deck from the ground on the right side (not rear). Grip tape or grip paint shall be supplied and installed as necessary on the stepping surfaces of the tailshelf. The tailshelf shall be a minimum 30" wide.

16. AMBER FLASHING LIGHTS two (2) rearward facing, alternating-flashing, amber sealed beam lights shall be supplied and installed on the top left and right side of the body at the rear. The lights shall be protected from damage with steel plates contoured around the lights. The lights shall be wired to the switch described in Section 18, "Upfitter Switches."

17. UPFITTER SWITCHES: Four factory installed upfitter switches shall be supplied and installed that will control the following components:
- a. PTO.
 - b. Amber rotating light.
 - c. Amber flashing lights.
 - d. Cabinet lights.

18. LEGENDS AND INDICATOR LIGHTS: Legends and indicator lights shall be manufactured to fit integrally with the dash of the vehicle. The legends shall have two levels of backlighting intensity. The low level shall be activated when the ignition vehicle is turned to on or accessory. The high level shall be activated only when the individual switch is activated. Each legend shall be labeled with the exact wording

requested by Caltrans. The legends and indicator lights shall include the following components:

- a. PTO legend. A PTO red indicator light to indicate when the PTO is engaged.
- b. Boom not stowed legend and red indicator light.
- c. An hour meter for PTO with legend

Final approval from the Division of Equipment, Specifications Engineer of the legends and indicator lights shall be obtained by the successful vendor prior to installation.

19. BODY GENERAL ASSEMBLY: A service and repair body suitable for use with the specified aerial device shall be supplied and installed. The body shall have overall minimum dimensions of 108-inches long +/- 2 inches, 94-inches wide +/- 2 inches, 43-inches high (measured at the front of the body), 20 inch compartment depth and a 54 inch floor width. The floor between the compartments shall not contain wheel wells; the depth of the longitudinal frame may be increased to eliminate the wheel wells.

The following tire chain clearance shall be provided in the body wheel wells, forward and rear - 5-inches, top - 8-inches. Measurement will be taken after supplier has completed installation of each unit.

The unit shall consist of two (2) body sections having compartments for the storage of miscellaneous articles. The sections shall be a minimum 20-inches wide by 108-inches overall length, mounted one (1) on each side of the floor plate.

The body sections shall be joined at the front by a vertical sheet extending from the floor plate to level with the bottom of the rear cab glass or uppermost surface of the body sections whichever comes first. A heavy-duty sliding type tailgate shall extend the full width of the load space and be not less than 12-inches high.

All adjustable shelves shall be tray type and adjustable for height on 2-, 3-, or 4-inch centers.

Treadplate (minimum 12 gauge) shall be used to provide rigidity and reinforcement for components mounted on the top of the body. A sign stating that the top can't be used for a working platform shall be provided on the top plate.

20. BODY RIGHT-HAND SECTION, CURB SIDE:

- a. Front: This vertical compartment shall have the following minimum dimensions 43-inches high by 31-inches wide, by 20-inches deep, have three (3) adjustable shelves, and have a single door.
- b. Second From Front: This horizontal compartment shall have the following minimum dimensions 24-inches high by 72-inches wide by 20-inches deep. Eight drawer units shall be installed in the compartment. Each unit shall be mounted on individual slides and be approximately 8" high x 34" wide x 16"

deep. Drawers shall be equipped with a minimum 250 lb. roller or ball bearing slides and shall include a quick disconnect. Each unit shall have a minimum of four removable dividers. The compartment and drawer frames shall be reinforced to accommodate a minimum of 1,000 lb. each. The compartment shall be supported at a minimum of two intermediate points in addition to the end supports.

- c. Rear Lower: This vertical compartment shall have the following minimum dimensions 18-inches (minimum) high by 27-inches wide by 20-inches deep, and have a single door. This compartment will be louvered as required if the vehicle is equipped with a 5-kw Engine Driven Generator, see Option 2.
 - d. The rear panel of the compartment and the compartment door shall be louvered if a 5000 Watt Engine Driven Generator is installed if required, see Option 2. The louvers shall be positioned to provide adequate airflow for the generator Electrical Control unit (ECU). The louvers shall be located in the rear of the compartment and adjacent to the bed above the floor.
21. BODY LEFT-HAND SECTION, STREET SIDE: The street side of the body shall be provided with compartments identical to those of the curbside of the body, except for the following:
- a. Front: This vertical compartment shall have the following minimum dimensions 43-inches high by a minimum 31-inches wide, by 20-inches deep, have three (3) adjustable shelves, and have a single door.
 - b. Horizontal: The interior of the horizontal compartment shall be equipped with four (4) half-length adjustable shelves; bolt bins will not be acceptable. The shelves shall be supported at the compartment center. The height of this horizontal compartment may be shortened, if necessary, only by the amount needed to accommodate the fuel filler hose installation as required by the chassis manufacturer.
 - c. Rear Lower: This vertical compartment shall have the following minimum dimensions 16-inches high by 26-inches wide by 20-inches deep, and have a single door.
22. BODY DOORS: Each compartment shall be provided with doors opening outward. Single vertical doors shall hinge at the front. Horizontal doors shall hinge at the bottom. All doors shall be equipped with manually detachable, chain or spring over center type door stays.

Doors shall be constructed with weatherproof and dust proof seals. All doors shall be fitted with rods not less than 5/16-inch diameter.

Door latches shall be the 3-point, twist locks with recessed pocket, chrome "T" handles. The three (3) point latches shall be located on opposite ends of the door and at the center. The latches shall not be readily removable from the outside. Means for securing locking doors shall be provided by either individual keyed locks or by master

lock bars with single locks. All compartment locks shall be keyed alike, and not less than four (4) master keys shall be furnished.

23. BODY LOAD SPACE: The load space shall be 54-inches wide and extend the full length of the body. The floor shall be ribbed or made rigid in some other acceptable manner with 12-gauge sheet steel.
24. REAR BUMPER: A heavy-duty rear bumper as shown in Drawing E2-D259-01 shall be fabricated and installed. This rear bumper assembly shall be match drilled and bolted, not welded, to rear frame web. Mount the bumper with a minimum of three (3), Grade 8, 1/2-inch bolts on each side.

Means shall be provided for safe access to the body deck from either side at the rear of the body including grip tread paint to be supplied and installed on the tailshelf and the step surface of the bumper. Additionally, grab handles shall be installed at the left and right rear of tailshelf and any additional steps above or below the bumper as needed.

25. BODY MATERIAL AND CONSTRUCTION: The body, hardware and superstructure shall be constructed entirely of steel and electric arc or resistance welded throughout to form a composite weatherproof and dust-tight unit. Exceptions as indicated will be permitted. All compartments and floors shall be formed using watertight and dust-tight construction.
- a. Sheets used in construction of the body shall be not less than the following:
 - 14-gauge: Tops, shelves and side box end panels.
 - 20-gauge: Doors (double panel construction).
 - 14-gauge: Doors (single panel construction).
 - 14-gauge: Front panel and side box panels.
 - b. Door panels shall be bolted with nylock type nuts to metal hinges and hinges shall be bolted with nylock type nuts to the body. Hinges shall not be welded to the body (no plastic or nylon hinges permitted).
 - c. Sheet metal screws shall not be used at any point in the fabrication of this unit. Bolts shall be steel, have a solid shank, and be of proper size and spacing to provide ample strength for the purpose intended. Exposed joints shall be weather tight and dust-tight.
 - d. Floor base members shall be formed from hot-rolled steel. Body sheets and door panels shall be galvaneal sheet steel. Floor plate shall be 1/8" treadplate, or made rigid in some other acceptable manner and shall be supported on a substantial steel frame of crossmembers and stringers. The body shall have not less than four (4) crossmembers: the front and rear crossmembers shall be minimum 10-gauge steel, the inside crossmembers shall be minimum 12-gauge steel.
 - e. Sheets and panels shall be reinforced wherever necessary to provide a proper degree of rigidity.

- f. All exposed edges of fenders, door panels, and shelving shall be folded, or otherwise stiffened and smooth. Do not bead edges to stiffen.
 - g. The floor in the load space shall have drainage outlets in the front section of body.
 - h. All compartments shall have a drainage outlet sealed with a rubber plug.
- 26. SIGNS: The following durable signs, with lettering legible at 12 feet, shall be supplied and placed visible to the operator; 1) Two (2) each signs shall read: "UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN 10 FEET OF HIGH-VOLTAGE LINES OF 50,000 VOLTS OR LESS." In addition to the above wording, the following statement in small lettering shall be provided on the warning signs: "For Minimum Clearances of High-Voltage Lines In Excess of 50,000 Volts, See California Code of Regulations, Title 8, Article 37, High-Voltage Electrical Safety Orders". 2) Sign(s) describing emergency operating procedures. The sign(s) shall be posted at the point of the emergency operation within plain view. For example a sign describing procedure for bleeding boom cylinders to let the bucket operator down would be posted in sight of the bleed valve. 3) See section 4 of the specification for description of the signs related to the boom lifting hook.
- 27. CALTRANS SUPPLIED PARTS: Caltrans shall supply all parts listed on the "CALTRANS SUPPLIED PARTS MATRIX". The parts matrix is a compilation of the individual "CALTRANS SUPPLIED PARTS SHEETS" show in the Technical specifications on page 2 of 15, Each parts sheet is an itemization of parts and options to be installed on each individual vehicle. It is the Vendor's responsibility to cross reference the parts matrix with the appropriate drawings. If the supplier finds any discrepancies with the parts matrix, drawings and specification, the supplier shall notify the Specification Engineer to rectify the discrepancy. Part(s) may be picked up from DOE at 34th and Stockton Boulevard in Sacramento between 7:30am and 2:30pm after a 5 days written notice of intent to pick-up the parts. Contact Rich Lundquist at (916) 227-9644 for arrangements. Parts may also be drop shipped directly to the successful bidder at the discretion of Caltrans. The vendor is **not** responsible for delays in parts delivery caused by Caltrans. The vendor is responsible to document the delays to receive a time extension for delays caused by Caltrans.
- 28. MISCELLANEOUS TO BE SUPPLIED AND INSTALLED:
 - a. Fender Extensions: Install fender extensions if necessary to cover duals over each wheel well.
 - b. Splash Aprons: Splash aprons shall be installed behind rear dual tires.
 - c. Backup alarm: A backup alarm shall be mounted securely to a truck frame crossmember at the rear on the driver's side. The backup alarm shall be wired to operate when the backup lights are on (Ref. ECCO Model 530).
 - d. License Plate Bracket: A license plate bracket with a license plate light shall be supplied and installed on the street side.

- e.
 - f. Final Certification: The supplier shall provide the FMVSS final-stage vehicle manufacturer's certification and label.
 - g. ANSI Verification: Supplier shall verify that the complete unit as mounted meets the most current ANSI Standard A92.2.
 - h. Wheel Chocks and Holders: Two (2) wheel chocks and wheel chock holders shall be supplied and installed on each side of the body. The wheel chocks shall be readily accessible from the ground.
 - i. Removable Vice Bracket: A removable vice bracket shall be supplied according to Drawing E2-D171-03. Provisions to mount the bracket shall be provided in two locations on the talishelf. The engineer shall approve mounting locations prior to installation.
 - j. Spare Tire Bracket: A spare tire and wheel shall be installed and mounted on a bracket according to Drawing E2-D117-01, location to be approved by the Specification Engineer.
 - k. Exhaust Pipe Rerouting: The exhaust pipe shall be rerouted to exit at the outer edge of the rear corner of the driver's side body, (gasoline engines only).
 - l. SIGN TUBE: A 6 inch sign tube shall be fabricated according to Drawing E2-D254-01 and installed on the top of the driver's side horizontal compartment as shown on Drawing I-01282-01.
 - m. COMPARTMENT LIGHTS: Each body compartment shall be equipped with rope type lighting that encircles the perimeter of the compartment opening, properly secured and wired to come on when its door is opened and the truck ignition is in accessory or on position. The lighting shall not interfere with adding or removing objects from the compartment.
 - n. Ladder Rack: A heavy duty (500-lb. capacity) angled ladder rack shall be mounted to the passenger side compartments. The rack shall be positioned such that it will not interfere with the operation of the hoist boom or platform and can be accessed from inside the body. The rack shall be fabricated from minimum 14 gauge square tubing, shall include tie-downs and a mechanism to secure the ladders with a padlock.
29. MATERIAL: Construction shall be of all new material free of rust and any defects. All components in the assembly shall be fabricated from a single piece of material. Material, which is joined by welding or other means to form a single piece of stock, is not acceptable. The finished product shall be free of dents and warpage. The use of any type of body filler is unacceptable. All bolts shall be Grade 5 or better and conform to SAE and ASTM standards. Bolt lengths shall be such that a minimum of two threads shall extend beyond the nut. Nuts shall be the locking type. Nuts and washers shall be compatible with the bolt(s) to which they are attached, as recommended by the fastener manufacturer and in accordance with SAE and ASTM standards. If requested, the supplier shall submit proof of fastener strengths.

30. METAL SHAPING: All breaks shall be free of cracks. Radii shall be at least twice the thickness of the material or in accordance with the requirements established by ASTM for the particular material being formed, whichever is greater. All holes shall be round, of the proper dimension, perpendicular to the material they are produced in, and finished smooth. Oblong holes or holes drilled, bored, etc. at angles are not acceptable. Holes and slots shall be drilled, punched, saw cut, plasma cut, or milled; torch cut is unacceptable. Sharp corners on all material shall be radiused to prevent personnel injury.
31. ELECTRICAL EQUIPMENT: Minimum electrical equipment shall comply with all Federal Motor Vehicle Safety Standards and State of California Department of Motor Vehicle regulations. All lights shall be the recessed type, mounted in rubber grommets. The tail, stop and turn signal may be in combination (Ref. Truck-Lite 40015 complete unit with reflectorized lens). Backup lights shall be installed (Ref. Truck-Lite 40004). Side marker, clearance, ICC lamps shall be installed and be 2-1/2-inch sealed units with reflectorized lens (Ref. Truck-Lite 10205R, 10205Y and 10401 grommet mounting kit). Combination tail, stop, turn, backup and side marker lights (Ref. Grote Series 52802, 52812, 52822, and 52832) may be furnished and installed in lieu of the separate lights; these shall be mounted to effectively use the side marker lights. Reflectorized lens shall meet all requirements for Class A reflectors. Mounting holes for lights shall be the proper dimension as recommended by the manufacturer of the light. The holes shall be punched or saw cut and finished smooth; torch cut holes are unacceptable.

All wiring installed by the supplier shall be the stranded copper type and shall have cross-linked polyethylene insulation and be protected in vinyl plastic auto loom and in areas specified, by rigid/flexible conduit. Minimum gauge of wire to the lights shall be in accordance with SAE standards for distance from power source and load demand. Wiring color code for lights shall comply with SAE standard J560 (b). The ends of all stranded conductors cut shall be mechanically stripped and fitted with insulated type terminals. The terminals shall be mechanically crimped securely with appropriate tool(s). All splices shall be sealed against moisture. Scotch Lock wire-type piercing devices shall not be used.

Appropriate tools shall be the following, or comparable, for use and purpose as applicable:

Wire Stripper: Ideal Industries, Inc., Catalog Number 45-092.

Cable Stripper: Ideal Industries, Inc., Catalog Number 45-128.

Multi-Crimp Tool: Ideal Industries, Inc., Catalog Number 30-429.

Cutting Pliers: Klein Tools, Inc., Number 7YLL (1104).

Ground return connections shall be attached to the vehicle frame, body and/or engine. In cases where the engine or body is mounted on rubber or other insulation, proper ground shall be provided with grounding straps.

The edge of all metal members which wire harness or loom pass through shall be deburred, flanged, rolled or bushed with suitable grommets. In general, wire routing shall be such that maximum protection is provided by the vehicle sheet metal and structural components. All electrical work and installation of equipment/devices shall be completed in a workmanlike manner, mechanically and electrically secure. Devices, lamps, etc., requiring periodic service shall be serviceable and accessible by providing wire length to reasonably accomplish this.

An SAE standard seven-terminal, trailer light wiring socket (Ref. Cole-Hersee No. 12310 with a No. 81356 boot, or comparable) shall be installed and wired in accordance with the attached wiring schematic, Drawing No. U1-A010-01. The wiring socket shall be installed in rear bumper above and left of the pintle hook.

32. **WELDING:** All welding shall comply with the requirements as represented in American Welding Society (AWS), D14.3-82, and American National Standard entitled "Specification for Welding Earthmoving and Construction Equipment."

All welds shall be continuous except as noted. Intermittent or spot welds shall be spaced and proportioned to provide ample strength for the material being welded. Weld sizes not indicated shall be equal to the thickness of the least of the joined plates.

All welds shall be properly fused, displaying proper penetration and a professional finish, and must meet the qualification requirements of applicable AWS specifications. Examples of unacceptable weldments are:

- | | |
|-------------|-----------------------|
| a. Cracks | d. Excessive Splatter |
| b. Undercut | e. Blow Holes |
| c. Overlap | f. Slag Entrapment |

Any weld failing to comply with the AWS specification or failing to pass a quality assurance inspection performed by the State, will be corrected by the manufacturer, at their expense, and be corrected off State property. The State shall determine if a weld is acceptable or deficient.

Any deficient weld shall be corrected by a welder who is certified in accordance with the requirements as established by the American Welding Society (AWS). The welder shall have the proper certification documents indicating that he/she is qualified to perform the type, size, and position of the weld performed, with the welding process utilized, and on the material being welded. The supplier will be required to supply proof of current welding certifications for personnel performing any re-welding on the unit, upon request of the State whether written or verbal.

GRINDING OF WELDS must have prior approval of the Department of Transportation, Division of Equipment, Engineering Specifications. Welds which have been ground without approval shall be subject to complete re-welding upon request, at no additional cost to the State.

All assembly dimensions and tolerances on drawings apply after welding. Excessive warpage of assembled parts is not acceptable. Weld symbols on drawings shall be interpreted per American National Standard Welding Symbols. In the event of the lack of a weld symbol, the best commercial practice shall prevail. The covering of welds with body fillers or similar materials is unacceptable.

33. PRIMER: All metal surfaces (including the outside, inside, underside, compartment interiors, etc., as applicable) shall be painted with lead free primer. All pins and pinholes (if applicable) shall be coated with grease only to prevent rust. All surfaces to be primed shall be prepared in accordance with the primer manufacturer's recommendations to provide maximum primer adhesion. All metal surfaces shall be primer painted with Amteco, Inc., Zero Rust Primer, Grey or Black color, not less than 3 mils dry film thickness. The primer coat shall be free from runs, drips, sags, etc., and shall be evenly applied.
34. PAINT: All metal surfaces shall be finish painted (including the outside, inside, underside, compartment interiors, etc., as applicable). The finish coat shall be free from runs, drips, sags, etc., and shall be evenly applied to provide a gloss finish. The finish coat shall be lead-free DuPont Imron 5000, Winter White (#N6431 HN H), polyurethane enamel; PPG Delta DUHS (#90604); or, Sherwin Williams Genesis (#G8-40687), NO EXCEPTIONS. All metal surfaces shall be primer painted in accordance with the paint manufacturer's recommendations, not less than 2 mils dry thickness. The finish coat shall be Winter White color referenced above, not less than 2 mils dry thickness (total of 4 mils). The finish or top coat shall be compatible for re-coat or touch-up with the above-referenced paint(s). All paint and primer shall be lead free.

STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION
DIVISION OF EQUIPMENT

ITEM NO.	UNIT	CAB	TRANS	ENG	CAP	C.A.	F.A.	R.A.
01282	EA.	C	A-5	G-300	17.95	60	6.5	13.5

SPECIFICATION NUMBER: 01282-128-083

SPECIFICATIONS FOR: A TRUCK MOUNTED 35-FOOT TELESCOPIC PERSONNEL
HOIST, ELECTRICAL UTILITY BODY AND EQUIPMENT

PURCHASE ESTIMATE NUMBER: 32-12-5414**

ADMINISTRATIVE REQUIREMENTS

1. **WARRANTY:** All installed equipment including any optional accessory or modification to cab and chassis, shall be free from defects in workmanship and materials and be covered (parts and labor) under warranty for one (1) year following the date the Department of Transportation (Caltrans) puts the unit into service. Caltrans will notify the supplier by mail of the in-service date and keep a record of the in-service date.

A copy of the manufacturer's standard warranty for the unit, any accessory, optional equipment, and components shall be supplied with each unit at delivery, or upon request. The dealer shall have an authorized repair location within a 250 mile radius of the delivery location each vehicle in the contract. The manufacturer will be held responsible for warranty (commencing from the date Caltrans puts the unit into service) for the following circumstances:

1. The manufacturer's standard warranty exceeds one (1) year. Under this circumstance, the supplier is responsible until one (1) year is reached. The manufacturer will be held responsible for the balance of the manufacturer's standard warranty.
2. The supplier is no longer an authorized dealer of the equipment supplied. Under this circumstance, the manufacturer will be held responsible for the balance of the manufacturer's standard warranty. The manufacturer shall establish a fully operational warranty service provider with capabilities equal to or exceeding the supplier's (or his designated warranty provider) within 45 days of the supplier's authorized dealer termination.

If the supplier is not the manufacturer or manufacturer's authorized representative, then a statement agreeing to the warranty conditions stated herein shall be signed by the manufacturer and submitted upon request prior to Purchase Order award.

An In-Shop Warranty agreement (see attached), signed by the supplier or manufacturer, shall be supplied prior to Purchase Order award.

Caltrans, at its option, may perform warranty work under the terms of the In-Shop Warranty agreement. If Caltrans opts not to perform the warranty work, the supplier shall pick up the unit within 48-hours of notification, written or verbal. The unit will be at a Caltrans facility. The unit shall be repaired and returned within 10 working days to the Caltrans facility where the unit was originally picked up. Upon prior approval with Caltrans and in compliance with all Caltrans Policies and Procedures, warranty work may be performed at a Caltrans facility.

The supplier may use a traveling mechanic to perform the warranty work. The supplier will be responsible for all associated costs (travel time, overtime, per diem, etc.).

Any supplier or manufacturer non-compliant with the warranty provisions set forth herein may be subject by the Procurement Division, Department of General Services, State of California to be removed from any future bidding.

For questions regarding the warranty or In-Shop Warranty agreement contact:

California Department of Transportation
Division of Equipment
P.O. Box 160048
Sacramento, CA 95816
Attn.: Warranty Coordinator (916) 227-9724

2. TRAINING: When training is requested on the Invitation For Bid, the supplier, at his expense, shall provide a qualified factory authorized service representative (not a salesman) to provide training for operators, mechanics, and parts personnel. This training (not a sales presentation) shall consist of hands-on operation, safety, service and adjustments for the operators; mechanical repair and adjustment specifications for the shop and field mechanics; parts manual orientation, nomenclature and ordering procedures for parts personnel. It shall also cover lubrication and servicing using Division of Equipment lubrication products. This lubrication product information will be provided to the supplier by the Division of Equipment Lubrication and Research Branch at (916) 227-9646.

A training plan outline, containing at least all of the subjects listed above, shall be submitted for approval within 30 days after receipt of the order (ARO) to the Division of Equipment Training Coordinator at (916) 227-9665.

The training shall be provided at the Caltrans Equipment Shop(s) specified in the Invitation For Bid. This training shall be for one (1) 8-hour day (or longer as the supplier or State deems necessary), and the date(s) of the training will be arranged by the Division of Equipment Training Coordinator (916) 227-9665. The full cost of this service shall be included in the bid. All training shall be accomplished within 45 days of acceptance and receipt of the unit at the shop indicated on the Invitation For Bid unless otherwise mutually agreed to between the supplier and the Division of Equipment Training Coordinator.

3. SERVICE REPRESENTATIVE: The supplier, at his expense, shall provide a qualified factory authorized service representative to be in attendance at the purchase order delivery site to make any necessary adjustments to the units and to give instructions to the equipment receiving inspectors to assure correct operation of the units supplied. The supplier shall supply the service representative for one (1) 8-hour day at the delivery destination. The cost for this service shall be included in the bid.
4. PRINTS: Prints are supplied electronically with the bid in PDF format. Any hard copies required for estimation, fabrication or sub-contractor communication will be the responsibility of the vendor.

The successful vendor will have 30 calendar days to review the submitted Drawings. If the supplier finds any discrepancies with the prints, the supplier shall notify the Department of Transportation, Equipment Specification's engineer. If the supplier fails to notify the Department of any discrepancies with the prints within this time frame, the supplier may be responsible for all costs involved in correcting the discrepancies on the units bid, as deemed acceptable by the Department.

5. IN-PROCESS REVIEW: The unit(s) may require an in-process review to verify timely progress of construction of the unit(s) and to ascertain compliance with the intent of the specifications and drawings. If there are any questions regarding the intent of the specifications or drawings, call the "Agency Contact" as indicated on the Purchase Order title page. Any in-process review will be at State expense conducted within the State of California only and will not constitute acceptance of the unit(s).
6. INSPECTIONS: This order will require a four (4) phase inspection process. For all inspections the unit(s) will be serviced, washed and ready for, as applicable, inspection or delivery. Inspections will begin within five (5) working days from the date of the inspection request by the supplier. It is the supplier's responsibility to contact the Equipment Parts Coordinator at (916) 227-9636 for inspections.

FIRST PHASE INSPECTION (CAB-CHASSIS): Upon receipt of the cab & chassis by the hoist manufacturer, and prior to any work, it is the supplier's responsibility to contact the Equipment Parts Coordinator at (916) 227-9636 for notification the cab & chassis has been received. If the cab & chassis has not been received within 120 days of the Purchase Order date, the supplier shall notify the Equipment Parts Coordinator of the anticipated delivery date.

The supplier shall provide a copy of the cab & chassis manufacturer's "build sheet" or "line setting ticket" to Caltrans, Division of Equipment, Quality Assurance Section (Fax: 916-227-5230). Quality Assurance and Engineering Specifications personnel will review the build information and notify the supplier that the cab chassis is either; acceptable; requires additional information; or requires corrective action based on the build sheet information submitted.

SECOND PHASE (PRE-PRODUCTION MODEL): The first production unit or pre-production model of the series of units on this order shall be completed in accordance with the specifications and drawings, including all requested items and sub-

components. Arrangements for inspection of the pre-production model shall be made only when all work is complete. This inspection trip shall be State financed at no cost to the supplier.

The supplier shall provide a qualified, factory authorized, service representative to be in attendance at the pre-production inspection, as well as the pre-delivery inspection (second phase), to answer all questions regarding construction and system design and function, to demonstrate all operations and functions, and to make any necessary adjustments to the units. The cost for this service shall be included in the bid.

On units where relative or interacting motions exist, these shall be demonstrated within the full range of movement.

Component parts or details shall not be pre-cut or pre-formed for the final assembly of the remaining units until the design has been proven acceptable on the first production unit or pre-production model.

The vendor shall receive a copy of the inspection report within 4 working days of the inspection indicating that the first unit is either acceptable or not acceptable. Unacceptable or non-compliant items will be listed on the report. If late delivery charges accrue, the vendor will not be held responsible for those days from the request of the inspection to the receipt of the inspection report.

Additionally, where applicable, the supplier shall complete and sign the supplier pre-delivery inspection (PDI) form and the supplier shall note the appropriate Purchase Order Number and Line Item on each form.

If additional interim inspections are required, such inspection trips shall be at the expense of the supplier at \$75.00 per hour (including travel time) and all expenses (meals, lodging, and cost of transportation). Travel expenses will be documented on State of California, Department of Transportation, Travel Expense Claim Form, FA302. These fees may be deducted from the invoice.

After inspection and acceptance by the State, the first production unit or pre-production model shall be the criteria or basis for acceptance of the balance of the delivery. This will not constitute final acceptance of each unit remaining on the Purchase Order.

THIRD PHASE (PRE-DELIVERY INSPECTION): In accordance with the State Administrative Manual, Section 4113 and the Caltrans inspection program, each unit will be inspected prior to shipment to the destination on the purchase order. This inspection trip(s) shall be State financed at no cost to the supplier.

Arrangements for pre-delivery inspections shall be made only when multiple units are complete. Each unit shall be identified with the applicable Purchase Order and Line Item. If corrections are needed as a result of the inspection, the corrections shall be made prior to shipment to the purchase order destination. Authorization to deliver

unit(s) must be granted by the Department of Transportation, Division of Equipment, Quality Assurance Section.

If additional interim inspections are required, such inspection trips shall be at the expense of the supplier at \$75.00 per hour (including travel time) and all expenses (meals, lodging, and cost of transportation). Travel expenses will be documented on State of California, Department of Transportation, Travel Expense Claim Form, FA302. These fees may be deducted from the invoice.

PRE-PRODUCTION AND PRE-DELIVERY INSPECTION LOCATION: The inspections shall be conducted by the Department of Transportation, Division of Equipment, Quality Assurance. These inspections shall take place at an adequate site provided by the vendor within the State of California. The inspection site shall meet all of the following criteria:

- a. The site shall not be the Purchase Order delivery destination. The site shall be paved, secure and zoned for commercial use.
- b. The site shall include electricity, lights, water, compressed air and a secure paved lot. The facilities shall also include lift equipment adequate to raise the units and support them on safety stands with a minimum of 12 inches of tire clearance. The supplier shall provide conditions which meet the safety standards of CAL-OSHA and Title 8 of the California Code of Regulations.
- c. The adequacy of the site shall be determined by the Department of Transportation, Division of Equipment, Quality Assurance Section. Contact the Quality Assurance Chief at (916) 227-9709 for approval.
- c. If the facility is deemed unacceptable by the Department of Transportation, Division of Equipment, Quality Assurance Section, the vendor shall be billed for the inspection trip including wages and expenses. This cost shall be deducted from the purchase order payment.

FOURTH PHASE (FINAL INSPECTION): Each unit will have a final inspection at its delivery destination shown on the Purchase Order to verify acceptability. The State will have five (5) working days after delivery of a unit to conduct the final inspection of said unit. Units delivered to the final Purchase Order destination will be accepted only when all Purchase Order requirements have been met, any shipping damages have been corrected, and all required documents are received by the Department of Transportation, Division of Equipment, Equipment Receiving. These documents include, as applicable, the invoice, vehicle registration documents, parts book, operator's manuals, service manuals, lubrication instructions and charts, warranty information, certifications, questionnaires, etc. Units which are not accepted by the delivery date on the Purchase Order will be considered delivered late.

If the supplier receives notice that the unit(s) is not acceptable, whether written or oral, the unit(s) shipped to the Purchase Order destination shall be removed within seven (7) calendar days. If the supplier fails to remove said unit(s) from the State's facilities

within the specified period, the State may forward said unit(s) to the supplier by common carrier at the supplier's expense and risk.

7. DELIVERY: Inspection, delivery, and final acceptance of all units on the Purchase Order shall be within 270 calendar days after the Purchase Order date. Contact the State of California, Department of Transportation, Division of Equipment, Equipment Parts Coordinator at (916) 227-9636 for delivery.

Completed units upon final delivery with more than 100 miles additional to the original pick-up mileage will be assessed \$2.00 per mile for each mile exceeding the 100 miles.

This charge shall be deducted from the purchase order price for each vehicle delivered against the Purchase Order.

Acceptance of delivery or placement in operation of any equipment shall not release the manufacturer from liability for faulty design, workmanship, or materials appearing even after final payment have been made.

8. LATE DELIVERY CHARGES: The parties to this agreement acknowledge that the State shall incur actual damages should the supplier fail to perform the work as called out in the contract and specification on the dates set forth herein. The parties, therefore, have agreed to late delivery charges in the amount of \$40.00 per unit per work day.

Workdays are Monday through Friday inclusive, except State holidays observed Monday through Friday inclusive.

The parties also agree that the amount specified is not unreasonable nor punitive in nature because both parties have carefully considered the amount specified and believe it to be a reasonable estimate, and not excessive at the time the purchase order is entered into.

It is, therefore agreed, that the supplier will pay the State of California the sum of \$40.00 per unit per work day (as stated above) for each work day the work remains uncompleted or unaccepted by the State, provided the total late delivery charges assessed against supplier shall in no event exceed twenty-five percent (25%) of the total value of the entire order, and the supplier agrees to pay said damages as herein provided. In the event such damages are not paid, the supplier agrees that the State may deduct the amount thereof from any monies due or that may become due said supplier.

9. PAYMENT: Process for payment will be initiated on each unit as units are received and deemed acceptable. The discount period will start after acceptance of each unit on the Purchase Order.
10. QUESTIONNAIRE: The attached questionnaire shall be completely filled out and will become a part of each bid submitted. Any portion of the questionnaire which is not

applicable to the equipment shall be shown as N/A (not applicable). Failure to submit a completed questionnaire could result in rejection of your bid.

Unless otherwise stated in the purchase order, the requirements of the written purchase order specification shall have precedence over the completed questionnaire; and the completed questionnaire shall have precedence over standard factory specifications or literature.

11. GENERAL: Each unit and any accessory shall be delivered completely assembled and ready to operate.

No exceptions to the specifications will be allowed unless the exceptions are listed on the purchase order or subsequent addenda.

The component parts of the unit shall be new and of proper size and design to safely withstand the maximum stresses imposed.

The manufacturer's torque rating of each driven part shall be equal to or exceed the torque rating of its driving member.

Complete printed specifications, published literature, and photos or illustrations of unit or units that the bidder proposes to furnish shall be supplied upon request.

All equipment and accessories cataloged as standard, unless superseded by these specifications, are to be furnished and included in purchase price of this unit.

The supplier or the manufacturer of the equipment being supplied shall guarantee that all replacement parts for the equipment shall be available for delivery to the State within five (5) working days after the request is telephoned to the manufacturer, or supplier. This requirement shall be in effect for a period of five (5) years after the date the equipment is put into service by the State of California. Suppliers may be removed from the bid list for failure to meet the parts availability obligation.

Bids will not be considered if supplier's designated f.o.b. delivery destination is other than the delivery address stated in the invitation to bid.

"Caravan" or "drive-away" deliveries from points outside the State of California will not be accepted.

The State reserves the right to amend the contract, up to 10% of the Purchase Order amount, to cover deficiencies or inconsistencies within or between the drawings and the technical specifications. These amendments shall cover the cost of any materials involved, and/or the standard shop labor rate for modification or installation.

The State reserves the right to purchase one (1) additional unit, or up to an additional 25% of the quantity on the Purchase Order, at bid prices, for State Agencies and California Local Government Agencies. Orders for such additional units shall be placed within 180 days of bid award date.

12. GROSS COMBINED WEIGHT RATING (GCWR) CERTIFICATION: Certification from the vehicle manufacturer of the Gross Combined Weight Rating (GCWR) of each unit on the Purchase Order shall be supplied at time of delivery. Documentation for **each** vehicle shall include Manufacturer; Model Number or name; VIN Number; and GCWR.

Documentation from the vehicle supplier or dealer **is not** acceptable.

13. OUT OF STATE TRAVEL: *If the supplier's inspection facility is not within the State of California*, the bidder should include in the bid price all expenses as listed below for inspection trip(s) for each person as outlined in the inspection section of the specifications and as follows:

- Airlines and vehicle reservations will be done through the State of California automated system (RESX).
- State employees assigned to inspection or travel will submit a Travel Expense Claim (TEC) to cover expenses for lodging, meals, per diem ground transportation mileage, tolls, parking, etc. to and from the airport at the point of departure - Sacramento, California and incidentals for each full workday at the supplier's designated facility for expenses incurred where the inspection(s) will be conducted in accordance with Caltrans Division of Accounting, Travel Reimbursement Guidelines as shown on <http://dot.ca.gov/hq/asc/travel/ch3.htm>. Travel expenses will be recorded in the State Accounting System as expenditure to Caltrans Equipment Program.
- Caltrans Division of Accounting will set up and Accounts Receivable to bill the Vendor after the TEC submitted by employee has been processed. TEC, Airline, and Car Rental expenses are normally billed 30 days after the travel date.
- After the vendor or manufacturer pays the bill, the Caltrans Division of Accounting will abate the recorded expenditures.
- All references to "inspection trip(s) shall be State financed at no cost to the supplier" shall be superseded for the above mentioned expenses when out of state travel is required by the vendor.

The vendor shall receive a copy of the inspection report within 4 working days of the inspection. Unacceptable or noncompliant items will be listed on the report. If late delivery charges accrue, the vendor will not be held responsible for days in excess of the specified inspection report return period from the end of the inspection to the receipt of the inspection report.

If additional interim inspections are required, such inspection trips shall be at the expense of the supplier at \$75.00 per hour (including travel time) for each employee in addition to the above mentioned Out Of State Travel Expenses.

The State's internal Out of State approval process takes approximately 2-4 weeks for approval. The successful Bidder should plan on submitting an official Out of State

request to the Equipment Receiving Manager, in a timely manner, as to assure the synchronization of the State approval with the corresponding inspection date. This process needs to be performed for as many inspections needed, as outlined in the inspection section of the specification. Inspections will begin within ten (10) working days from the date of the out of state inspection approval.

NOTE: A time extension shall not be granted if the successful bidder does not initiate the Out of State travel request within a timely manner, as to allow the State ample time for the approval process.

14. FINAL MANUFACTURER'S I.D. PLATE REQUIRED: A Final Manufacturer's Identification label shall be attached to the complete unit. The label shall be in compliance with the National Traffic and Motor Vehicle Safety Act, section 114 and Federal Code of Regulations 49.
15. SAFETY: The entire unit and accessories shall comply to the applicable provisions of the California Vehicle Code, the Safety Orders of the Division of Industrial Relations, and all Federal regulations in effect at the time of manufacture

*I HAVE RECEIVED, READ, AND AGREE TO THE
ADMINISTRATIVE REQUIREMENTS FOR SOLICITATION 57303 OF
NINE(9) PAGES. STAN TOMCHESSON*

Stan Tomchesson

QUOTE MANAGER

TIME MFG.

4/28/09

OPTIONS

1. DIESEL ENGINE: A turbo-charged, four cycle diesel fueled engine with a minimum SAE J1995 gross brake power rating of 350 horsepower (HP), a minimum gross torque rating of 650 lb.-ft. and a minimum displacement of 6.0 Liters. The engine shall be equipped with: an exhaust gas recirculation; a diesel oxidation catalysis; a diesel particulate filter; a fuel-line filter; a 135 amp alternator; a heater and water separator; an integral engine oil cooler; a vacuum pump. The vehicle shall be equipped with the following additional instrumentation "Wait To Start", "Water-In-Fuel"; "Fuel Filter" and "Air Filter" indicator lights a tachometer and turbo boost gauge.

Option 1 Price \$ 5,301.00

2. ENGINE DRIVEN GENERATOR: A hydraulic driven generator capable of producing a minimum of 5000 Watts continuos power and 6250 Watts surge shall be supplied and installed. The generator shall be installed using the manufacturer's assembled hydraulic mounting kit and shall be coordinated with the hydraulics for the personnel hoist, i.e. starting or changing the output of the generator shall not affect the operation of the hoist. The hydraulic schematic for the generator and hoist shall be approved by the specifications engineer prior to installation of the system. The reservoir shall be capable of holding a volume of oil greater than 250% of the maximum flow of the hydraulic pump. The generator shall be capable of producing a 60 Hz, pure sine wave at 120 VAC at 20-amp with a maximum 2% output distortion. The system shall be equipped with an electromagnetic interference/radio frequency interference (EMI/RFI) filter, (Ref. Auragen G-5000). The Electronic Control Unit (ECU) shall be equipped with the manufacturer's shock mount bracket and the manufacturer's hydraulic mount bracket. The generator shall be installed in the one of the following configurations:
 - a. The ECU, generator and hydraulic motor shall be installed in a frame approved by the specifications engineer above a louvered skid plate behind the rear axle below the tail shelf.
 - b. The ECU, the generator and hydraulic motor shall be installed in the rear driver's compartment. The rear driver's compartment shall be reinforces as required.

Option 2 Price \$ 7,214.00

3. 1,800 WATT INVERTER: A minimum 1.8 KW true sine wave inverter shall be supplied by Caltrans and installed the successful vendor in the front curb side compartment as shown on Drawing No. U1-D022-01. The inverter shall have a minimum 2900 watt surge capacity (Xantrex Prosine 1800). The system shall be powered by a minimum 165 amp, constant duty, high temperature alternator with a compatible regulator shall be installed, (Ref Penntex PX-220TF-6.0L or PX-520RD / PX-525RD for a diesel or gasoline engine respectively) in lieu of the factory alternator. An Absorbent Glass Mat (AGM) battery shall be installed in the front driver's side compartment to provide additional power, as shown on Drawing No. U1-D022-02. The additional battery shall be electrically isolated from the engine starter battery as shown and located in the front street side vertical cabinet.

(CALTRAN SUPPLIED)

Option 3 Price \$ 1,322.00
*INSTALL ONLY WITH
ALTERNATOR*

4. FOUR WHEEL DRIVE: A shift on the fly four wheel drive system with an instrument panel control. The four wheel drive system shall have a minimum GAWR of 7,000 lb. front axle and shall be capable of shifting on the fly from 4x2 to four wheel drive at speeds up to 55mph. The four wheel drive system will include a two speed transfer case front drive shaft and a front axle with automatic locking hubs. A traction control system that will compute wheel spin from the differentials and reduces torque to match the best traction to the wheels for that terrain. Timbren Suspension Kits (SES Kits) shall be installed in lieu of the front stabilizer (Ref. Timbren FF550SDE or comparable). Payload may be reduced by a maximum of 500 lbs due to additional weight of four wheel system.

Option 4 Price \$5,107.00

5. FIBERGLASS PLATFORM: The platform shall be constructed of fiberglass in lieu of metal tubing. Nominal size-24"x24"x42" deep shall be mounted as described in Section 9, "Platform," of the specifications. A platform stow/unstow legend and switch shall be added to the upfitter switches. Described in Section 19. Controls shall be fabricated and supplied to stow the platform in the horizontal position.

The platform shall be equipped with a "U" shape exit/entry 18 inches wide x 28 inches high minimum. This opening will be used for entering and exiting the platform with the boom stowed. The opening shall be located to allow entry/exit to the platform from the curbside of the tailshelf. The top of the opening shall be equipped with a safety strap made of synthetic material. A crawl through opening will not be acceptable.

The following items shall be fabricated or supplied as described in section 7. Safety belt, lanyard, steel attachment loop, automatic hydraulic leveling, and tool tray.

Platform shall be made from molded reinforced fiberglass plastic laminated with iso-resin. The platform shall have minimum thickness; 1/4-inch bottom, 1/4-inch top reinforcing lip, 3/16-inch sides, and 1/4-inch on a 4- to 5-inch reinforcing band around the "U" shape exit/entry.

The platform shall have either water drain hole with a plug in the bottom of the platform removable from the outside or a means to hydraulically tilt the platform sufficiently to dump water from the platform.

The platform shall have Maximum Capacity 400 pounds stenciled with black 4-inch minimum letters on both sides. The letters shall be visible from the ground when the platform is installed and operational.

Option 5 Price \$1,400.00

6. Electrical Outlets: Four (4) NEMA Type 4X rated, 120-volt external duplex, u-ground, spade-type receptacles with flip-top weather cap(s) (Ref: Daniel Woodhead Watertite Wiring Devices). shall be installed in the following locations:

1. One (1) on the outside rear of the passenger's side rear compartment.

2. One (1) on the front of the passenger's side bumper.
3. One (1) on the front of the driver's side front bumper.
4. One (1) accessible from the personnel bucket.

Wire from the inverter to the outlet boxes shall be protected in flexible metal conduit. Any conduit exposed outside the body compartments and truck cab shall be flexible liquid-tight conduit with watertite fittings for connectors. All outlets shall be GFCI protected. Receptacles shall have circuit breaker protection from a panel of circuit breakers. All external receptacles shall have watertight covers.

NOT
Option 6 Price \$ REQUESTED

7. CABLE REEL: A live cable reel shall be mounted on top of the passenger side section of the service and repair body. The cable reel shall be supplied with a watertite duplex electrical outlet. Additionally, One (1) 120-Volt electrical duplex outlet shall be accessible from the personnel bucket, and one (1) 120-Volt electrical duplex outlet shall be accessible from the front driver's side bumper (Ref: Daniel Woodhead NEMA Type 4X rated, Watertite Wiring Devices). The body shall be reinforced to support the additional loads related to operating the reel. The reel shall be capable of storing and supplied with a minimum 100feet of 12 gauge, 3-wire, AWG cord. All outlets shall be GFCI protected. Receptacles shall have circuit breaker protection from a panel of circuit breakers. The wiring junction box shall be supplied with the minimum gauge of wire required in accordance with SAE standards for distance from power source and load demand. The cable reel shall be equipped with a chain and sprocket driven levelwind device and a four-way roller assembly and a cable stop. A bellows collar shall be placed over the fairlead-reversing shaft. The stainless steel roller fairlead shall have four (4) rollers. If the cable reel has exposed drive sprockets and chain, it shall be protected with a removable guard. A weatherproof push button switch shall be installed on the unit, to rewind the power reel.

Option 7. Price \$ 3,940.00

8. ELECTRIC TRAILER BRAKE CONTROLLER: An electric trailer brake controller (Ref. Raybestos Model #761-9035 or comparable) shall be installed under the dash within easy reach of the driver and wired to the trailer jumper cable in accordance with Drawing No. E2-C97-01. If an electric trailer brake controller is available from the factory may be utilized in lieu of the above specified model.

NOT
Option 8 Price \$ REQUESTED

9. Heated Mirrors: An ice & frost-free mirror with an internal heating element, and a dash mounted normally open momentary switch to shut power to internal heating element once the ignition switch is turned off shall be supplied and installed. The mirror shall be installed and mounted in the original factory brackets and housing.

Option 9. Price \$ 685.00
*INCLUDES OPTION 10 FOR
POWER WINDOWS AND LOCKS*

10. Power Windows & Door Locks: Power windows and power door locks shall be furnished and installed.

Option 10 Price \$ ^{SEE} OPTION 9

11. Front Mounted Battery Jacks: The front mounted battery jack shall be installed in a protected location on the front bumper in an accessible location. The jack shall be connected to the electrical system as shown on Drawing No. I-08-01282-FD-ES1.

Option 11 Price \$ 455.00

12. Extended Cab: A factory installed extended cab, with a cab to axle dimension of 60-inches shall have a wheelbase of 160 +/- 5 inches. The extended cab shall have seating (including seatbelts for six with bench seats, five for bucket seats).

Option 12 Price \$ 4,592.00

13. Installation of Caltrans Level 3 Lighting: Installation of an eight element high intensity low profile warning light shall be installed as shown on Caltrans Drawing No. I-01282-02. The controller for the light bar shall be installed in the lower center of the dash. The light bar controller shall be installed in the electrical system as shown on Drawing I-08-1282-FD-ES1.

Option 13 Price \$ ^{NOT} REQUESTED

PERSONNEL HOIST QUESTIONNAIRE

1. VEHICLE

Manufacturer FORD

Model F550 4x2

2. CAPACITY:

Mfg. GVW 17,950 lbs.

Front Axle Curb Weight* 4,751.29 lbs.

Rear Axle Curb Weight* 7,139.55 lbs.

Total Curb Weight* 11,890.84 lbs.

* COMPLETED VEHICLE WEIGHT

3. WHEEL BASE: Wheel base 141 in.

4. ENGINE:

Manufacturer FORD

Model 6.8L 3-VALVE SOHC EFT TRITON V10

Displacement: Cubic Inches _____

Net HP 362 @ 4,750 RPM

Net Torque 457 ft. lbs. @ 3250 RPM

5. FRAME:

Resistance Bending Moment 363,600 in. lbs./rail

6. TRANSMISSION:

Manufacturer FORD

Model AUTO TORQSHIFT w/OD

No. Speeds 5

Rating 18,300 lbs.

7. FRONT AXLE:

Make DANA
Model Rating 7,000
Rating 7,000 lbs.

8. REAR AXLE:

Make DANA 51-10
Model 13,660 Rating lbs.
Ratio 4.88

9. WHEELS:

Front Rim Size 19.5 in.
Rear Rim Size 19.5 in.
Manufacturer Rating Front 3,750 lbs. PER WHEEL
Manufacturer Rating Rear 3,750 lbs. PER WHEEL

10. TIRES:

Front Size/Load Range LT 225/70R x 19.5 G BSW AS
Rear Size/Load Range LT 225/70R x 19.5 G BSW AS

11. HOIST:

Manufacturer VERSALIFT / TIME MFG.
Model SST 37N
Weight: (Assembly i.e. hoist, subframe, bucket, body, etc) 11890.84 lbs.
Hoist only 2190 lbs.

Performance Characteristics:

a. Height from ground to bottom of bucket 37 ft, in.

- b. Horizontal distance from centerline of rotation to the outer edge of the platform 27'9" ft, in.
- c. Angle of elevation
- i. Degrees above horizontal 74°
- ii. Degrees below horizontal 14°
- d. Capacity 400 lbs. in any position
- e. Rotation continuous or noncontinuous (circle)
12. TRAVEL HEIGHT: STOWED 10'4" in.
13. PLATFORM STOWED POSITION: Front _____ Rear ✓
14. CONTROLS: Write in type for each location:
- i. Pedestal TOGGLE
- ii. Buckets JOYSTICK/UNITROL
- iii. Remote TOGGLE
- Joystick provided for bucket control? ☒ YES ☐ NO
15. HYDRAULIC SYSTEM: (Fill in where applicable)
- i. Auxiliary engine drive:
- Manufacturer _____
- Model _____
- ii. Hydraulic pump:
- Manufacturer MUNCIE
- Model PF SERIES
- iii. Hydraulic throttle control:
- Manufacturer _____
- Model _____

16. INVERTER: (if equipped)

Manufacturer Supplied by CALTRANS (PROSINE)

Model CT# 030.4799 MFG. 806-1800 Watt

17. GENERATOR (if equipped)

Manufacturer AURAGEN

Model G5000

18. INSPECTION: Address of first production unit specification compliance inspection location:

Truck Hydraulic Equipment Co. Inc.

14262 Whittram Avenue

Fontana, CA 92335

19. WARRANTY: Address, Phone Numbers & Name of Contact for Warranty Service Provider(s):

For Aerial (s) : Truck Hydraulic Equipment Co. Inc.

14262 Whittram Avenue

Fontana, CA 92335

Don Beck and Dave Brashear - Phone # (800) 428-8010

20. Caltrans in-shop warranty

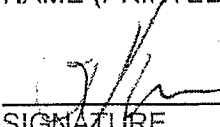
Agreement signed?

☒ YES

☐ NO

Truck Hydraulic Equipment Co. Inc.
COMPANY
14262 Whittram Avenue

Fontana, CA 92335
ADDRESS
(800) 428-8010
TELEPHONE NO.

Randy Kyhn
NAME (PRINTED)

SIGNATURE
President
TITLE

List Any Additional Information or Exceptions To The specifications Below Or Attach Sheets.

CALTRANS IN-SHOP WARRANTY AGREEMENT

Name of Supplier/Manufacturer TIME Manufacturing Co.
Warranty Representative (print or type) Truck Hydraulic Equipment Co. Inc. for Aerial & Body (s)
Street Address 14262 Whittram Avenue
City, State, Zip Code Fontana, CA 92335
Telephone Number (800) 428-8010
Solicitation No. 57303 Due Date 05/01/2009 @ 2:00 p.m.
Item (Quantity/Brand/Model) 23 - Versalift - SST-37-N

When equipment is purchased for Caltrans, a section of the specifications requires the supplier/manufacturer to enter into an In-Shop Warranty Agreement.

The terms of the In-Shop Warranty Agreement for this equipment are as follows:

1. Labor rate charged by Caltrans will be \$100.00 per hour.
2. Warranty claims will be processed on a Caltrans Work Order unless the supplier/ manufacturer furnishes standard warranty forms.
3. Suppliers'/manufacturers' standard flat rate time schedules shall be used as a guide for In-Shop Warranty repair time. If a supplier's'/manufacturer's flat rate time schedule is not available, Caltrans will use the time that is recorded on the Caltrans Work Order.
4. Replacement parts will be available within 5 working days from the date of receipt by supplier/manufacture of a Purchase Order, whether the order is made by telephone or in writing.
5. Replaced parts will be held 60 days for inspection by the supplier/manufacture.
6. Original Equipment Manufacturers' parts will be used as replacement parts; or, if OEM parts are not available, after-market parts of equal or better quality will be utilized.
7. Copies of invoices for all parts will be provided to the supplier/manufacture.

Caltrans will contact the supplier/manufacture for authorization to perform In-Shop Warranty repairs as stated in this agreement. Only under extreme emergency conditions will In-Shop Warranty be performed without prior authorization. If Caltrans opts not to perform the warranty work, the supplier shall pick up the unit within 48 hours of notification, written or verbal.

In-Shop Warranty Agreement shall remain in effect until all conditions of warranty in the State of California specifications and in the original manufacturer's warranty expire.

Signature, Caltrans Warranty Coordinator _____

Signature, Supplier/Manufacturer _____

Date

Date

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	21			
	Equipment ID - EBR #	7004224			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

Assigned Loc'n	22
Equipment ID - EBR #	7004787
MTC Class	01382
PE	5414
PO# S32	

CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 4	Four Wheel Drive			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Option 10	Power Windows			1	
Option 12	Extended Cab			1	

Caltrans Supplied Parts

051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping-White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	23			
	Equipment ID - EBR #	7005079			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 3	1.8K Inverter			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Option 10	Power Windows			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
030-4820	Circuit Breaker 150 Amp Manual Reset	185-150-F-01	Bussmann	2	
7610	Relay Auto Charging 120 Amp	7610	Blue Sea	1	
030-4865	Fuse ANL 250 Amp	ANL 250	Bussmann	1	
030-4863	Holder ANL Fuse	5005	Blue Sea	1	
032-4794	Battery 12V 210 AH Group 4D	AGM-12210L	Concord	1	
030-4799	Inverter 1800 Watt	806-1800	Prosigne	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	24			
	Equipment ID - EBR #	7004425			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	25			
	Equipment ID - EBR #	7004035			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 7	Cable Reel			1	
				.	
				.	
				.	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	26			
	Equipment ID - EBR #	7003924			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 7	Cable Reel			1	
Option 11	Front Mounted Battery Jack			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
032-4776	Jumper Cable w/ Socket	STC-922-25	Safety Connect	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	26			
	Equipment ID - EBR #	7005258			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	26			
	Equipment ID - EBR #	7005261			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal-Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	26			
	Equipment ID - EBR #	7005262			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	27			
	Equipment ID - EBR #	7004076			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	27			
	Equipment ID - EBR #	7004077			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2.Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	27			
	Equipment ID - EBR #	7004082			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	27			
	Equipment ID - EBR #	7004083			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	27			
	Equipment ID - EBR #	7005382			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
				.	
				.	
				.	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	27			
	Equipment ID - EBR #	7005385			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 3	1.8K Inverter			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
030-4820	Circuit Breaker 150 Amp Manual Reset	185-150-F-01	Bussmann	2	
7610	Relay Auto Charging 120 Amp	7610	Blue Sea	1	
030-4865	Fuse ANL 250 Amp	ANL 250	Bussmann	1	
030-4863	Holder ANL Fuse	5005	Blue Sea	1	
032-4794	Battery 12V 210 AH Group 4D	AGM-12210L	Concord	1	
030-4799	Inverter 1800 Watt	806-1800	Prosine	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	27			
	Equipment ID - EBR #	7005388			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 3	1.8K Inverter			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
030-4820	Circuit Breaker 150 Amp Manual Reset	185-150-F-01	Bussmann	2	
7610	Relay Auto Charging 120 Amp	7610	Blue Sea	1	
030-4865	Fuse ANL 250 Amp	ANL 250	Bussmann	1	
030-4863	Holder ANL Fuse	5005	Blue Sea	1	
032-4794	Battery 12V 210 AH Group 4D	AGM-12210L	Concord	1	
030-4799	Inverter 1800 Watt	806-1800	Prostine	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	28			
	Equipment ID - EBR #	7004255			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 2	Engine Generator			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	28			
	Equipment ID - EBR #	7004969			
	MTC Class	01282			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 2	Engine Generator			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1510	Decal Unleaded Fuel	20M1510	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	31			
	Equipment ID - EBR #	7004890			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (2 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script Orange Tailgate	03-D007-01		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	26			
	Equipment ID - EBR #	7005790			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (4 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script	03-D007-01-1		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	26			
	Equipment ID - EBR #	7005791			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (4 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script	03-D007-01-1		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	26			
	Equipment ID - EBR #	7005792			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (4 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script	03-D007-01-1		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special-Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

Assigned Loc'n	25			
Equipment ID - EBR #	7005870			
MTC Class	01382			
PE	5414			
PO# S32				

CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (4 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script	03-D007-01-1		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

Build Sheet

Project: 07^8-01282 Personnel Hoist

	Assigned Loc'n	24			
	Equipment ID - EBR #	7006305			
	MTC Class	01382			
	PE	5414			
	PO# S32				
CT #:	Part Description:	MFG P/N or DWG Num:	MFG:	QTY:	Installed By:
Options					
Option 1	Diesel Engine			1	
Option 2	Engine Generator			1	
Option 5	Fiberglass Platform			1	
Option 7	Cable Reel			1	
Caltrans Supplied Parts					
051-3274	Carrier Sign Tube 6" PVC	E2-D254-01		1	
051-1946	Rack Water Can 2 Gallon	E2-D223-01		1	
908-1083	Vise	675	Wilton	1	
057-1665	Bracket Spare Tire	E2-D117-01		1	
034-1964	Caltrans Level 2 Lamp Warning Mini Bar Rotating Dual Halogen Amber	450112-02	Target Tech	1	
034-1290	Lamp Back Up 4" Clear Sealed	40004	Truck-Lite	2	
034-4890	Marker 2.5" Red L.E.D. (4 Req'd)	10050R	Truck-Lite	4	
034-4845	Lamp 4" Round Amber L.E.D.	607128-02	Federal Signal	2	
054-1654	Alarm Backup	530	Ecco	1	
034-1265	Socket 7-wire	11-721	Pollak	1	
034-4804	Boot for 7 Wire Socket	755-5002	Balkamp	1	
034-4921	Lamp Clearance & Marker 3 Lamp Bar Red L.E.D.	35740R/LED	Truck-Lite	1	
034-4897	Lamp License Plate L.E.D.	15040	Truck-Lite	1	
053-2800	Decal State Radio Protected Circuit	053-2800	Tayco	1	
053-4813	Roll Orange Reflective Tape (As Required)		3M	1	
053-4760	Decal CT Reflective Door (2 Req'd)	03-D004-01		2	
053-4763	Decal Caltrans Script Blk (2 Req'd)	03-D005-01		2	
053-4802	Decal Caltrans Script	03-D007-01-1		1	
053-5135	Decal "CT" (Use with Script 053-4802)	03-D013-01		1	
053-5138	Decal "R" Trademark	03-D013-01		1	
053-2047	Rear Safety Striping White & Orange 8" X 8'	20-2047	Spec.	1	
053-4829	Decal Slow for Cone Zone		Tayco	1	
053-4892	Unit ID Number Sheet		Tayco (Special Order)	1	
053-1511	Decal Diesel	20M1511	Spec.	1	

ITEM	QTY	DESCRIPTION
101	1	ASSEMBLY 6x 102,103, 104,107,108, 110, & 111.
102	1	1/4 x 1 1/4 x 4 LONG HRS FLAT BAR
103	1	3/4-10-UNC X 6 HEX. HD. BOLT GRADE 8
104	1	3/4-10 WING NUT. MCMASTER-CARR (190866A1B0)
107	1	3/16 x 4 x 7 LG HRS STRIP
108	1	2 x 2.32x1FT x 187x LG STD STL CHANL
110	1	1 x 1 x .063 WALL x 6 LG STL 50 TUB'G
111	1	3/16 x 1 x 4 LONG HRS STRIP
112	1	STATE SUPPLIED LOCK.

1. ALL JOINTS TO BE WELDED CONTINUOUS UNLESS OTHERWISE SPECIFIED. SIZE OF ALL WELDS TO BE AT LEAST THE THICKNESS OF THE THINNER OF THE ADJACENT METALS.

2. FOR UTILITY BODY MOUNT ONLY. WELD ITEM 110 TO ITEM 108 AND USE ITEM 111 AS AN INTERIOR BRACE. ITEMS 110 AND 111 ARE NOT TO BE INCLUDED FOR STANDARD PICKUP BED.

WIRE PARTS TOGETHER FOR DELIVERY TO H.O. SHOP.

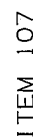
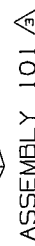
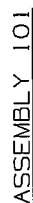
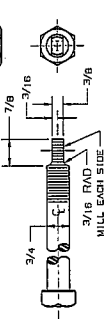
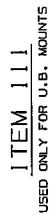
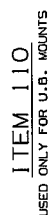
1. GRIND AND DEBURR ALL SHARP CORNERS & EDGES.

5. ALL WELDS, ELECTRICAL AND PAINT WILL BE IN COMPLIANCE WITH CALTRANS EQUIPMENT QUALITY STANDARDS. GO TO www.dot.ca.gov/hq/eqsc TO VIEW EQUIPMENT QUALITY STANDARDS.

△ 6 ADJUST HEIGHT IF REQUIRED TO FIT BODY.

[illegible]

CT 5TK #057-1665



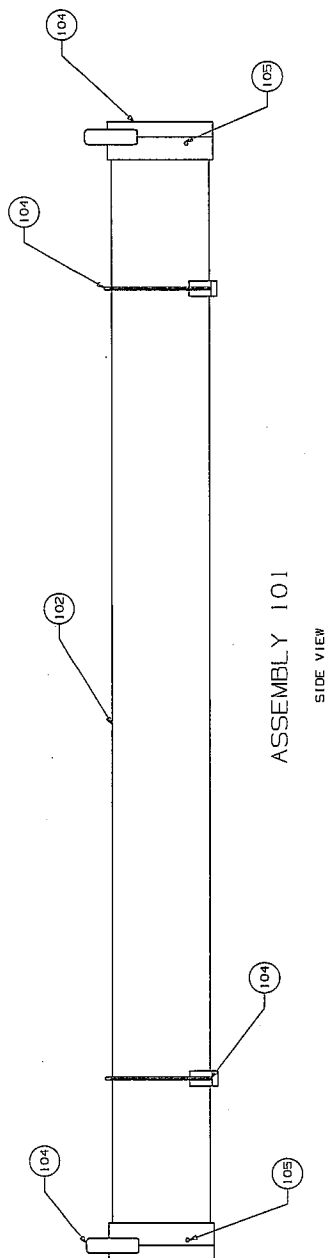
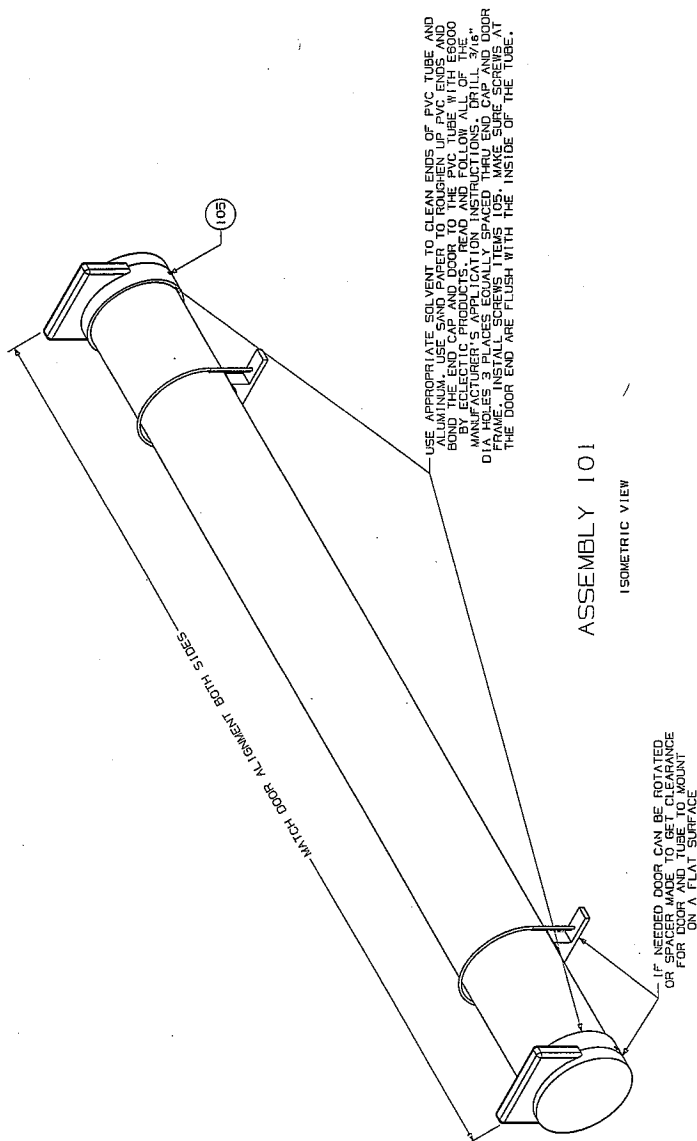
ITEM	QTY	DESCRIPTION
101	1	ASBY. CONSISTS OF 102,104-105
102	1	5" EMT CONDUIT, SCH 40 X 74" L, PVC, GRAY REF. "A" GRANITE ELECTRICAL SUPPLY 916-648-3900
104	1	5" CAST ALUM KIT, 2 DOORS, SADDLE AND U BULBS, BLANCO 180, 100-20 PVC
105	6	PLASTIC SIZOR, 3/4" TO 1" FLAT, MCMASTER-CARR, #EE630A242

1. ALL WELDS, ELECTRICAL AND PAINT WILL BE IN COMPLIANCE WITH CALTRANS EQUIPMENT QUALITY STANDARDS. GO TO www.dot.ca.gov/hq/eqasc TO VIEW EQUIPMENT QUALITY STANDARDS.

PE 32-12-5414

D	10/07/77	CHANGED DRG AND DOV TO INCLUDE 2 DOORS	JOHNSON
B	6/05	CHANGED MATERIAL TO GREY PVC CONDUIT	JOHNSON
C	6/04	REMOVED ITEM 107 EAC QWZ COMES FROM THE KIT	J Payne
A	MMT 02	ITEM 105, 106 & 107 ADDED NEW ITEM 105, 106 & 107 ADDED NEW	J Payne
REV		STATE OF CALIFORNIA DEPARTMENT OF CALIFORNIA EQUIPMENT SERVICE CENTER	BY
NEXT ASSEMBLY			
SIGNATURE OF THE OFFICER			
PENDING 1			
PENDING 2			
PENDING 3			
PENDING 4			
PENDING 5			
PENDING 6			
PENDING 7			
PENDING 8			
PENDING 9			
PENDING 10			
PENDING 11			
PENDING 12			
PENDING 13			
PENDING 14			
PENDING 15			
PENDING 16			
PENDING 17			
PENDING 18			
PENDING 19			
PENDING 20			
PENDING 21			
PENDING 22			
PENDING 23			
PENDING 24			
PENDING 25			
PENDING 26			
PENDING 27			
PENDING 28			
PENDING 29			
PENDING 30			
PENDING 31			
PENDING 32			
PENDING 33			
PENDING 34			
PENDING 35			
PENDING 36			
PENDING 37			
PENDING 38			
PENDING 39			
PENDING 40			
PENDING 41			
PENDING 42			
PENDING 43			
PENDING 44			
PENDING 45			
PENDING 46			
PENDING 47			
PENDING 48			

C.I.T STOCK # : 051-3274 ITEM 101



BILL OF MATERIALS

ITEM	QTY	DESCRIPTION
101	1	WELDED ASSEMBLY C/O ITEMS 102-118
102	1	1/8" x 12" x 1/4" LG. STEEL TREAD PLATE, WELD 4 WAY
103	2	3/8" x 3" x 1/8" FLAT BAR
104	2	1/4" x 4" x 1/8" FLAT BAR
105	2	1/4" x 4" x 1/8" FLAT BAR
106	1	1/4" x 3/4" x 5 LG HRS FLATBAR
107	2	1/4" x 3/4" x 11 7/8 STEEL FLAT BAR
108	1	1/4" x 5 1/2" x 12 LG HRS FLATBAR
109	1	1/4" x 3 1/2" x 4" STEEL FLAT BAR
110	1	3" x .250W x 9/8 LG STL 50 TUBE
111	1	2 1/2" x .250W x 11/2 LG SEAMLESS STEEL 50 TUBE
112	2	3/8" x 10 x 10 STEEL PLATE
113	2	4 x 5.4 LB/FT x 1/4 LG STEEL CHANNEL
114	1	12 GA. 1.1051 x 9 1/4 x 1/4 STEEL PLATE
115	2	4 x 4 x 1/4 L ANG. STEEL
116	1	4 x 6 x 9/16 x 40 STEEL ANGLE
117	1	EYE, WELD-ON CAMPBELL # 710-5302
118	2	2 1/2" x 2 1/2" x .188W x 3/4 LG 50. TUBE /500
119	2	1/2-13 UNC HEX NUT, GRADE 8

NOTES: WELDS, ELECTRICAL AND PAINT WILL BE IN ACCORDANCE WITH THE FOLLOWING QUALITY STANDARDS: GO TO WWW.DBS-CO.COM/QUALITY STANDARDS.

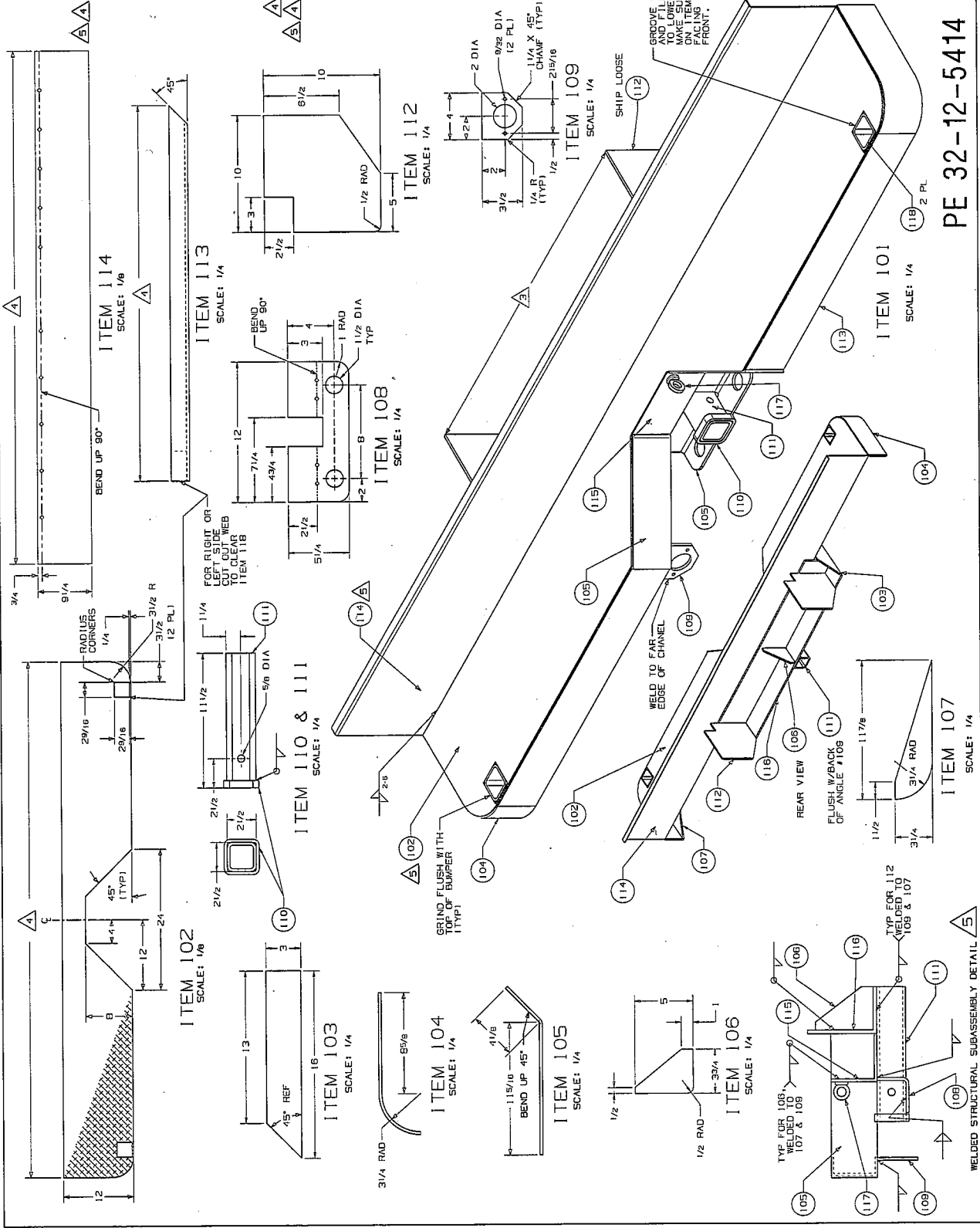
2. ALL JOINTS TO BE WELDED CONTINUOUS UNLESS OTHERWISE SPECIFIED. SIZE OF ALL WELDS TO BE AT LEAST HALF THE THICKNESS OF THE THINNER OF THE ADJACENT METALS.

THIS DIMENSION TO BE DETERMINED AT ASSEMBLY TO CND AND CHASSIS.

WHEN THE BUMPER IS TO BE FURNISHED WITH A BODY, THE BUMPER BODY WIDTH, CUT TOS & 110 AS REQUIRED.

WELD DECKING # 102 AND # 114 WELDED AFTER THE STRUCTURAL SUBASSEMBLY IS BUILT. SEE DETAIL LOWER LEFT CORNER OF DRAWING.

6. DEBURR AND GRIND ALL SHARP EDGES



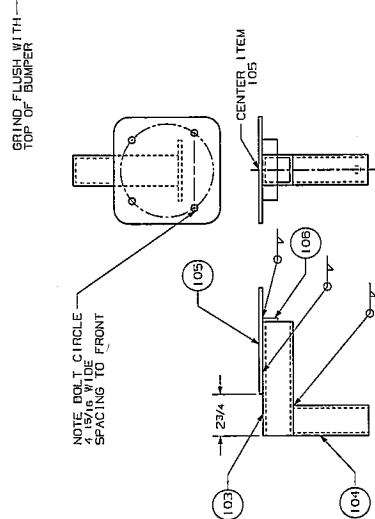
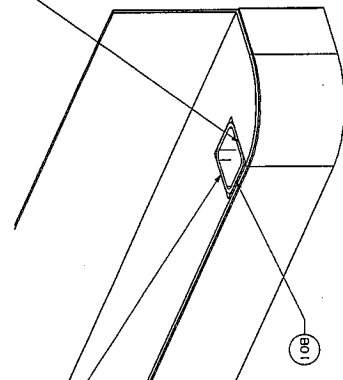
REV	DATE	DESCRIPTION	DOWN IN
A	10/4/08	ADDED FLANGE TO 114	BY
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF EQUIPMENT			
NEXT ASSEMBLY		REAR BUMPER - PERSONEL LIFT	
SCALE AS NOTED		DATE 12 DEC 01	
DRAWN		E2-0259-01	
CHECKED		E2-0259-01	
APPROVED		E2-0259-01	
SHEET		SHEET	

PE 32-12-5414

BILL OF MATERIALS

ITEM	QTY	DESCRIPTION
101	1	WELD MOUNTING KIT, ITEM 102, 103, 104, 105, 106, 107, 108, 109, 110, 111
102	1	WELD SUPPORT, ITEM 103, 104, 105, 106
103	1	2 x 2 x 3/16 t x 7 1/2 lg. 50 TUBE, STL, A500 GR. B
104	1	2 x 2 x 3/16 t x 5 lg. 50 TUBE, STL, A500 GR. B
105	1	1/4 t x 7 x 7 lg. H.R. STL, FLAT, A-36
106	1	1/4 t x 1 x 4 lg. H.R. STL, FLAT, A-36
107	1	1/2-13 UNC HEX NUT, GRADE 8
108	1	2 1/2 x 2 1/2 x 3/16 t x 24 lg. 50 TUBE, STL, A500 GR. B
109	1	1/2-13 UNC X 2" HEX BOLT, WASHER AND LOCKWASHER, GRADE 8
110	4	3/16-16 UNC X 2" HEX BOLT, WASHER AND LOCKWASHER, GRADE 8
111	1	WELD, UTILITY, WILTON 875. CT# 808-1083

GROOVE WELD ALL AROUND
TO LOWER CHANNEL.
MAKE SURE NUT ON ITEM
108 IS DOWN AND FACING
TOWARD THE FRONT OF THE
TRUCK.



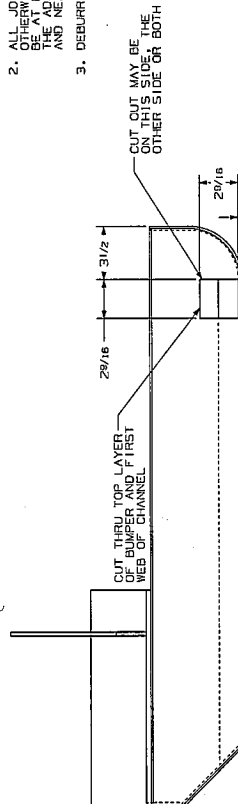
ITEM 102

ITEM 101

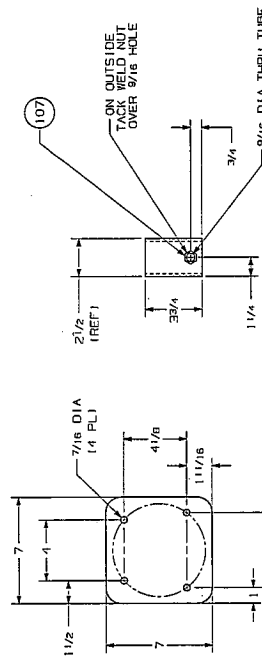
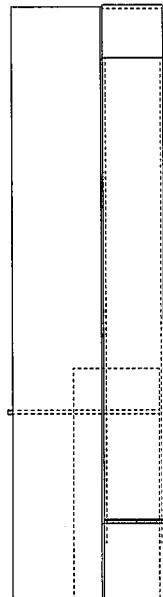
NOTES:
1. ALL WELDS, ELECTRICAL AND PAINT WILL BE IN
COMPLIANCE WITH CALTRANS EQUIPMENT QUALITY
STANDARDS GO TO www.ct.gov/ctdot/eqspec TO
VIEW EQUIPMENT QUALITY STANDARDS.

2. ALL JOINTS TO BE WELDED CONTINUOUS UNLESS
OTHERWISE SPECIFIED. THE THICKNESS OF ALL METALS
SHALL BE AT LEAST THE THICKNESS OF THE THINNER OF
THE ADJACENT METALS. WELDS TO BE UNIFORM
AND NEAT IN APPEARANCE.

3. DEBURR AND GRIND ALL SHARP EDGES

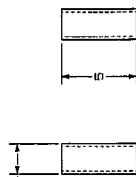


TYPICAL STEP BUMPER
TOP VIEW



ITEM 105

ITEM 104

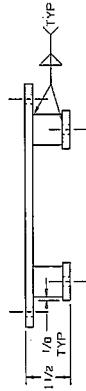
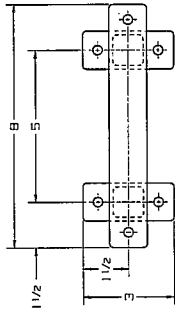


PE 32-12-5414

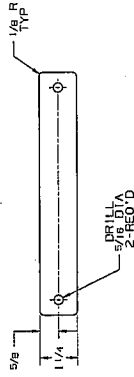
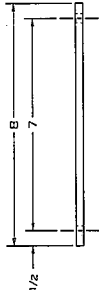
REV	ASSEMBLY	DESCRIPTION	BY
1	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF EQUIPMENT	STEP BUMPER MOD. WELD BRACKET AND INSTALLATION	
DATE	1/4	DATE	30 JAN 02
DRAWN	J. Engino	SCALE	X
CHECKED		PROJECT	EZ-0280-01
REVISIONS			

BILL OF MATERIALS

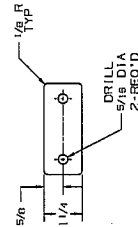
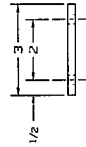
ITEM	QTY	DESCRIPTION	CT STK #
101	1	WELD'D ASSY C/D 102 TO 104	
102	1	1/4 x 1/4 x 8 LG HRS FLAT BAR	
103	2	1/4 x 1/4 x 3 LG HRS FLAT BAR	
104	2	1 x 1 x .065 x 1 LG STL 50 TUBS	



ITEM 101
SCALE : 1/2



ITEM 102
SCALE : 1/2



ITEM 103
SCALE : 1/2



ITEM 104
SCALE : 1/2

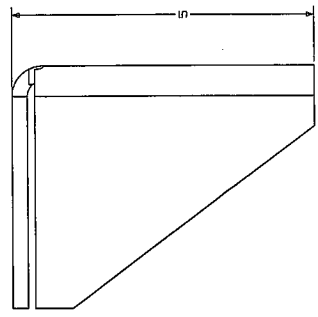
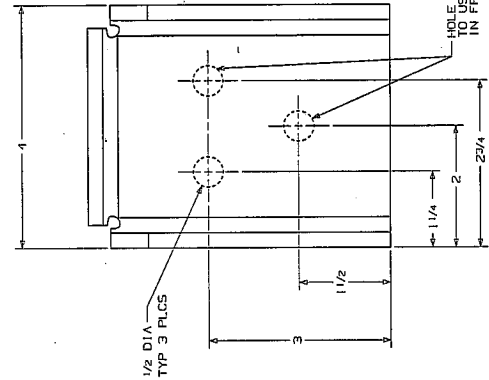
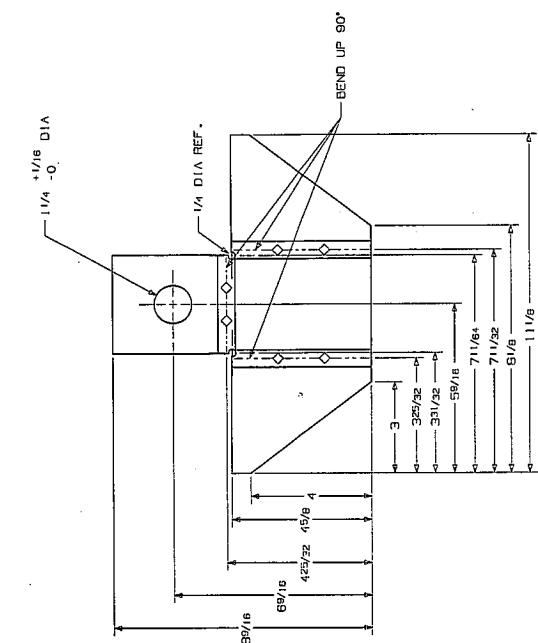
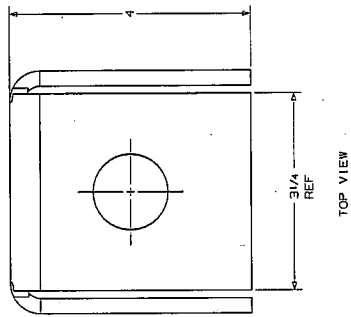
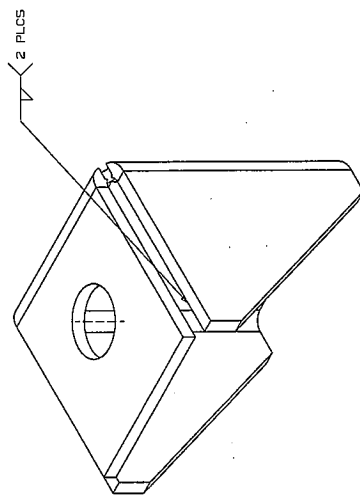
NOTES:

1. ALL WELDS, ELECTRICAL AND PAINT WILL BE IN COMPLIANCE WITH CALTRANS EQUIPMENT QUALITY STANDARDS. ALL WELDS SHALL BE WELDED TO VIEW EQUIPMENT QUALITY STANDARDS.
2. REMOVE ALL BURRS AND SHARP EDGES.
3. ALL JOINTS TO BE WELDED CONTINUOUS UNLESS OTHERWISE SPECIFIED. SIZE OF ALL WELDS TO BE 1/8 INCH OR GREATER. WELDS TO BE UNIFORM AND NEAT IN APPEARANCE.

PE 32-12-5414

REV	DATE	DESCRIPTION	BY
NEXT ASSEMBLY		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	
FOR Dwg E2-0281-01		DIVISION OF EQUIPMENT	
		6" SINGLE SIGN TUBE MOUNTING BASE	
DESIGNED BY		SCALE AS NOTED	
CHECKED BY		DRAWN J. R. HINE	
APPROVED		SCALE 1/8" = 1"	
		DATE 10/24/07	
		PROJECT NO. E2-0281-01	
		REVISIONS	

ITEM	QTY	DESCRIPTION
301	1	1/4 x 8 9/16 x 1 1/8 LG HRS PLATE



I. ALL WELDS TO BE CONTINUOUS UNLESS OTHERWISE SPECIFIED. SIZE OF ALL WELDS TO BE AT LEAST THE THICKNESS OF THE THINNER OF THE ADJACENT METALS.

PE 32-12-5414

[illegible]

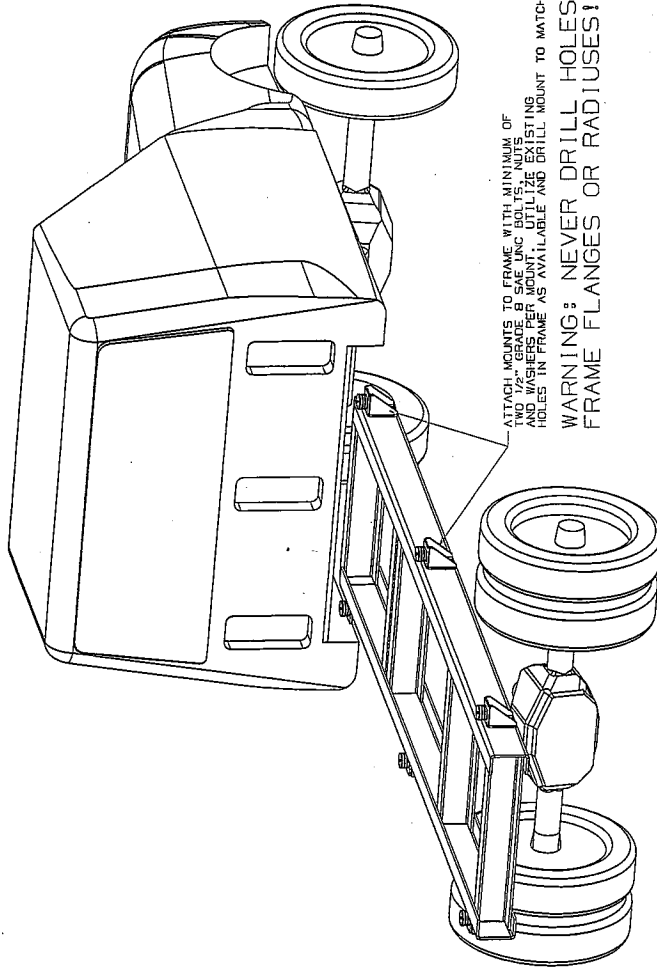
BILL OF MATERIALS		
ITEM	QTY	DESCRIPTION
101	6	ENERGY SUSPENSION 9.11023 URETHANE BODY VOLT BUT TIGHT MATERIAL
102	6	1/2" X 1" NC GRB BOLT
103	12	1/2" FLAT WASHER SAE GRB
104	6	1/2" LOCK WASHER GRB
105	6	1/2" HEX NUT NC GRB
106	1	REF DWG E2-0282-03

NOTES:

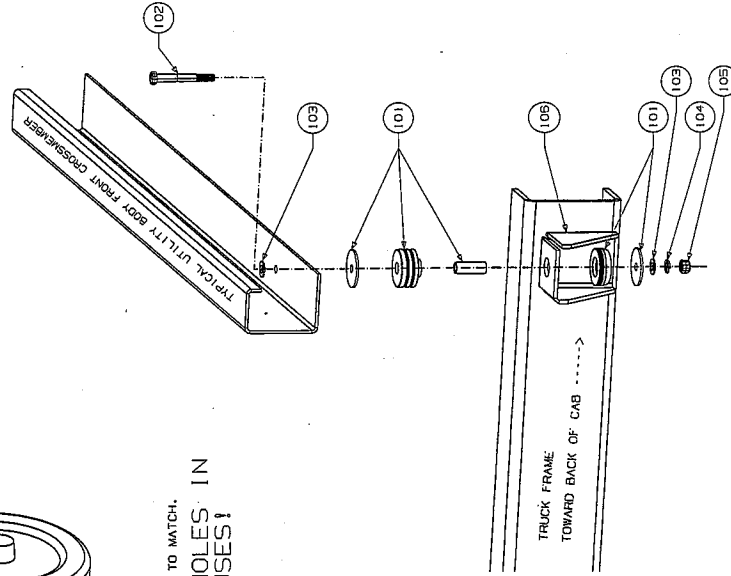
- ALL WELDS, ELECTRICAL AND PAINT WILL BE IN COMPLIANCE WITH CALTRANS EQUIPMENT QUALITY STANDARDS. GO TO www.dot.ca.gov/eqc TO VIEW EQUIPMENT QUALITY STANDARDS.
- ALL JOINTS TO BE WELDED CONTINUOUS, UNLESS OTHERWISE SPECIFIED. SIZE OF THE WELDS TO BE IN ACCORDANCE WITH THE THICKNESS OF THE ADJACENT METALS. WELDS TO BE UNIFORM AND NEAT IN APPEARANCE.
- THE WORK SHALL BE POSITIONED FOR FLAT WELDING WHENEVER POSSIBLE. USE PROPER POSITIONING AND SEQUENCING TO AVOID EXCESS SHRINKAGE STRESSES OF THE ASSEMBLY.
- ALL STEEL NOT SPECIFIED SHALL BE ASTM A36 OR BETTER.
- REMOVE ALL BURRS AND SHARP EDGES.

PE 32-12-5414

REV	DESCRIPTION	DATE	BY
1	STATE OF CALIFORNIA DIVISION OF HIGHWAYS DIVISION OF EQUIPMENT		
UTILITY BODY URETHANE ISOLATION MOUNT UNIT GREATER THAN 15,000 LBS			
DATE	NOV 4/2008	E2-0283-01	
APPROVAL	DESIGNED	DRAWN	
REVISION	REVISED	REVISED	
REVISION	REVISED	REVISED	



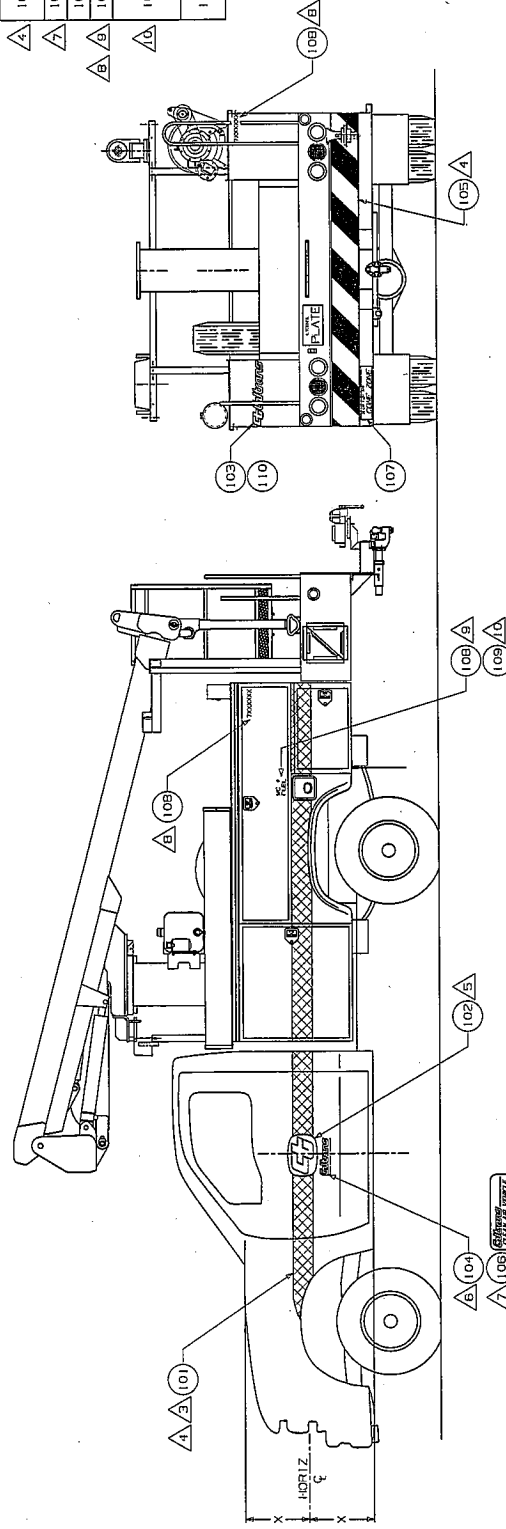
TYPICAL URETHANE ISOLATION MOUNT INSTALL
FOR UTILITY BODY (6 MOUNTS)



TYPICAL EXPLODED INSTALL VIEW

BILL OF MATERIALS

ITEM	QTY	DESCRIPTION	CT STK #
101	AR	3M SCOTCH-LITE ORANGE REFLECTIVE TAPE 3M# 680-14 5" WIDE	053-4813
102	2	DECAL, "CT"	053-4760
103	1	DWG# C3-D004-01 DECAL, "CALTRANS" 3 INCH ORANGE	053-1802
104	2	DWG# C3-D007-01 DECAL, BLACK "CALTRANS"	053-4763
105	1	DWG# C3-D005-01 STRIPING, ORANGE & WHITE DIAGONAL	053-2017
106	2	EVERETT-DENNISON 911 98" LG	053-4759
107	1	CONE ZONE" DECAL	053-4829
108	1	LOGO # 1 & MC # DECALS SPECIAL ORDER	053-4892
109	1	APPROPRIATE FUEL TYPE DECAL: "UNLEADED FUEL ONLY" "E-85 OR GASOLINE" "DIESEL ONLY"	053-1510 053-1511 053-1511
110	1	3" DECAL, "CT"	053-5132
111	1	DWG# C3-D013-01	



REAR VIEW

DRIVER SIDE VIEW PASSENGER SIDE- SAME DECALS

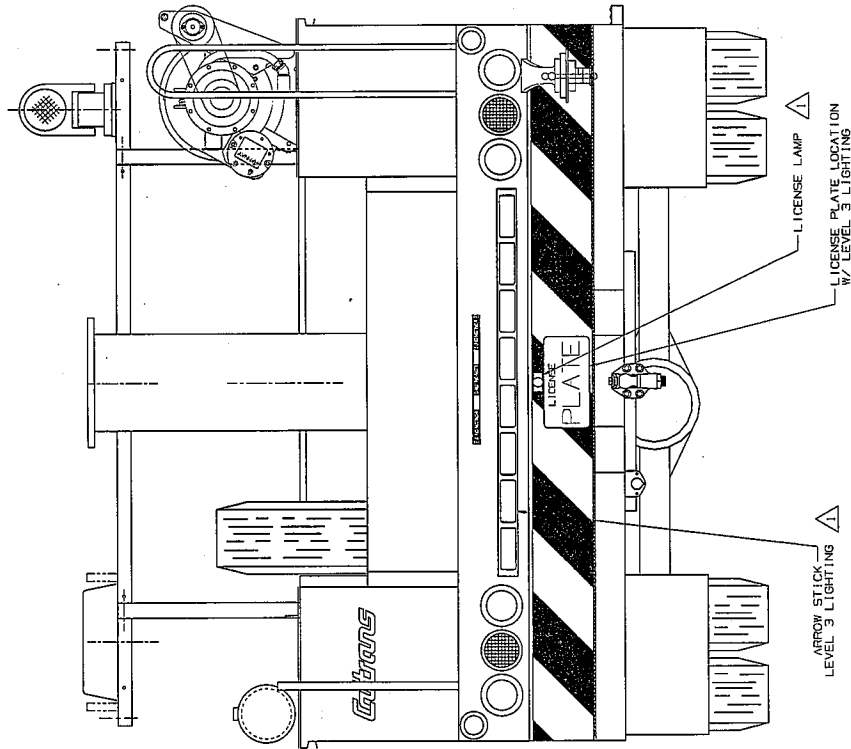
NOTES:

- ALL DELINEATION WILL BE IN COMPLIANCE WITH CALTRANS EQUIPMENT QUALITY STANDARDS. GO TO www.dot.ca.gov/hq/eqsc TO VIEW EQUIPMENT QUALITY STANDARDS.
- STRIPING APPLICATION: ALL STICKERS, LABELS AND STRIPING SHALL BE APPLIED USING WET APPLICATION. ALL STICKERS, LABELS AND STRIPING SHALL BE LEVEL, STRAIGHT, BUBBLE FREE AND DEBRIS FREE. NO SPlicing OF TAPE OR STRIPING SHALL BE ACCEPTABLE. ALL EDGES ON STRIPING SHALL BE TRIMMED 1/8 INCH FROM THE EDGES OF DECALS, BELLS, AND REFLECTED DURING APPLICATION. SINCE THE REFLECTIVE MATERIAL WILL BE COMPROMISED, IT WILL BE REPLACED.
- LOWER EDGE OF ITEM 101 TO BE LOCATED AS NEAR TO THE HORIZONTAL CENTER LINE OF THE VEHICLE AS BODY OUTCUT (UNDER BELL) AND BODY CONTOUR LINES PERMIT. NEVER PLACE THE LOWER EDGE OF ITEM 101 BELOW THE HORIZONTAL CENTER LINE OF THE VEHICLE.
- TRIM ORANGE REFLECTIVE SHEET (ITEM 101) AND STRIPING (ITEM 105) TO MATCH BODY CONTOURS AND CREASES.
- ITEM 102 TO BE LOCATED SUCH THAT "CT" LOGO IS CENTERED ON ITEM 101 AND CENTERED ON THE VERTICAL CENTER LINE OF THE DOOR.
- ITEM 104 TO BE LOCATED BELOW THE "CT" LOGO AND ALONG THE VERTICAL CENTERLINE OF THE DOOR.
- FOR CLEAN AIR VEHICLES ONLY. IF CLEAN AIR VEHICLE, REPLACE ITEM 104 WITH 106.
- SEVEN-DIGIT EQUIPMENT IDENTIFICATION NUMBER (E.G. 104) ALWAYS STARTS WITH "104" AND SHALL BE AFFIXED TO ALL FOUR CORNERS OF THE FRONT BUMPER. THE FRONT CORNER OF THE FRONT BUMPER (AS VIEWED FROM THE FRONT) SHALL BE THE RIGHT CORNER OF THE FRONT BUMPER. THE FRONT CORNER OF THE FRONT BUMPER (AS VIEWED FROM THE FRONT) SHALL BE THE RIGHT CORNER OF THE FRONT BUMPER. THE FRONT CORNER OF THE FRONT BUMPER (AS VIEWED FROM THE FRONT) SHALL BE THE RIGHT CORNER OF THE FRONT BUMPER.
- FIVE-DIGIT MAINTENANCE CLASS NUMBER (MC #) SHALL BE AFFIXED ABOVE OR NEXT TO THE FUEL FILLER.
- FUEL TYPE DECAL SHALL BE AFFIXED DIRECTLY BELOW THE MC # AND ABOVE OR NEXT TO THE FUEL FILLER.

PE 32-12-5414

D	12/04	EDITED	ITEMS AND NOTES	JJ
C	3/02	ADDED	ITEM 106	DOWNIN
B	1/02	ITEM 101, 580 TO 680		DOWNIN
A	12/01	ADDED SMOOTH BUMPER DETAIL		DOWNIN
REV		DESCRIPTION	BY	
NEXT ASSEMBLY				
STATE OF CALIFORNIA				
DEPARTMENT OF TRANSPORTATION				
DIVISION OF EQUIPMENT				
PERSONNEL HOIST DECALS & STRIPING				
2001-02				
SCALE	DATE	10/31/01	DESIGNED	STAFF
DRAWN	J.M./V.D.	DESIGNED	STAFF	
CHECKED		APPROVED		
REVISION				
1-01282-DE				
WETLEY/LARSEN				

BILL OF MATERIALS			
ITEM	QTY	DESCRIPTION	MANUF. CT #



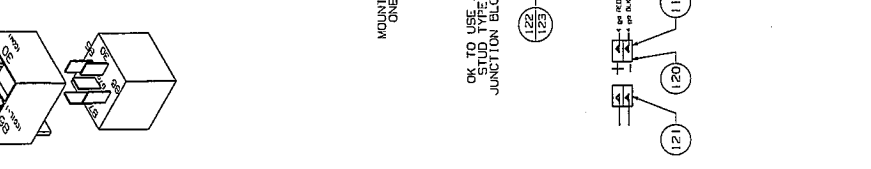
△ PART NUMBERS -
SEE DWS 1-08-01282-FD-ES1.2

PE 32-12-5414

OPTION ARROW STICK DETAIL

REV	F	04/08	NEW SHEET 2, OBS SHEET 2 ELEC.	DOWNIN	BY
DESCRIPTION:					
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION					
DIVISION OF EQUIPMENT					
PERSONNEL HOIST, 35 FOOT LEVEL 3 LIGHT OPTION					
SCALE		DATE		1-01282-02	
DOWN		DOWNIN		DRAWN	
CHECKED		APPROVED		SHEET 2 OF 2 SHEETS	

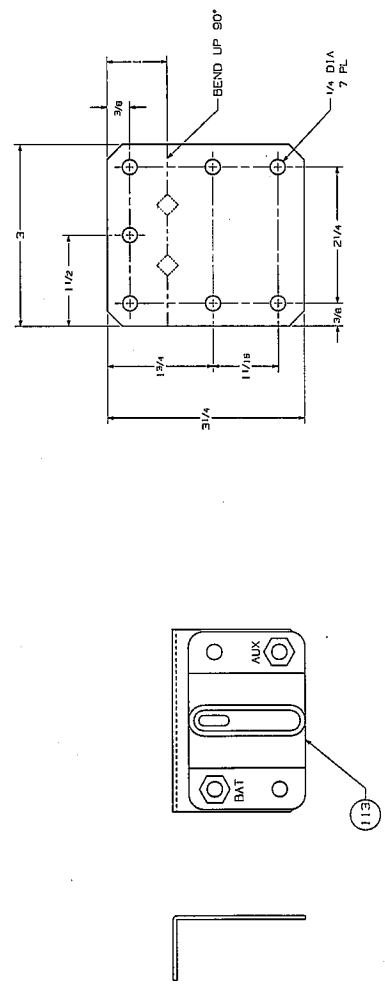
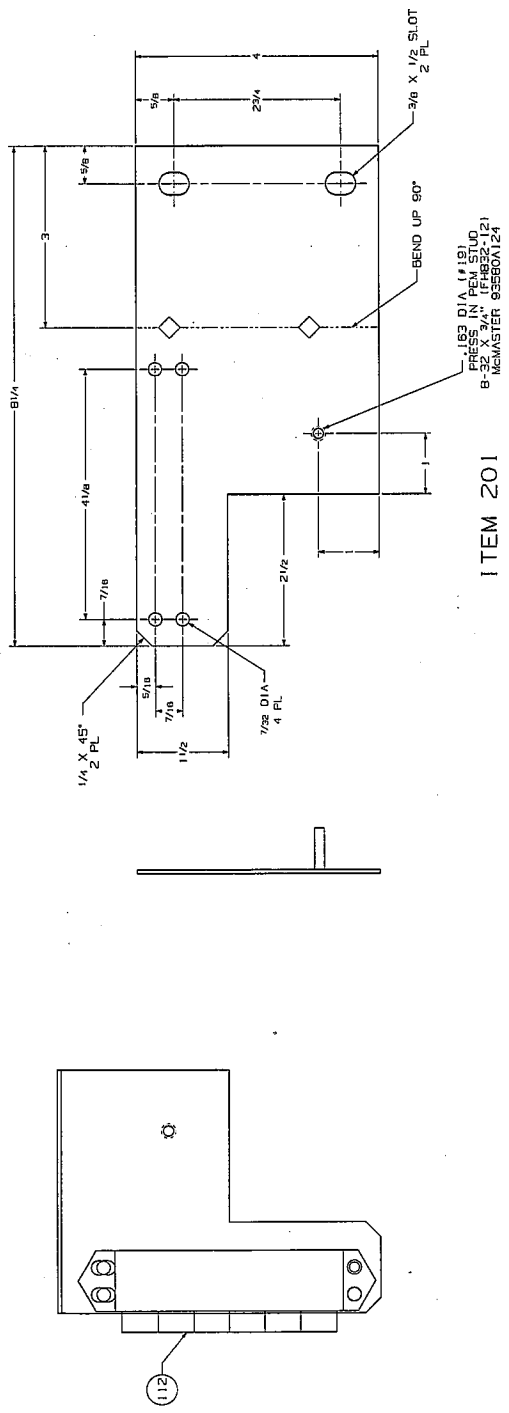
4



SIZE AWG	NM OF COND	INSULATION COLOR	RED, WHT	RED, WHT BLK, GRN, RED; WHT, GRN	RED, WHT
12	1				
14	1				
10	1				

WIRE RECORD	
WIRE NO.	WIRE RECORD
12	RED, WHT
14	RED, WHT
16	RED, WHT
18	RED, WHT
20	RED, WHT
22	RED, WHT
24	RED, WHT
26	RED, WHT
28	RED, WHT
30	RED, WHT
32	RED, WHT
34	RED, WHT
36	RED, WHT
38	RED, WHT
40	RED, WHT
42	RED, WHT
44	RED, WHT
46	RED, WHT
48	RED, WHT
50	RED, WHT
52	RED, WHT
54	RED, WHT
56	RED, WHT
58	RED, WHT
60	RED, WHT
62	RED, WHT
64	RED, WHT
66	RED, WHT
68	RED, WHT
70	RED, WHT
72	RED, WHT
74	RED, WHT
76	RED, WHT
78	RED, WHT
80	RED, WHT
82	RED, WHT
84	RED, WHT
86	RED, WHT
88	RED, WHT
90	RED, WHT
92	RED, WHT
94	RED, WHT
96	RED, WHT
98	RED, WHT
100	RED, WHT

BILL OF MATERIALS				
ITEM	QTY	DESCRIPTION	MANUFACTURER	CT NO.
201	1	14 GA 1.0751 3/4 X 4 STEEL SHEET, HOT ON COLD ROLLED, ASTM A569 OR ASTM A566		
202	1	16 GA 1.061 3/4 X 3 STEEL SHEET, HOT ON COLD ROLLED, ASTM A569 OR ASTM A566		



PE 32-12-5414

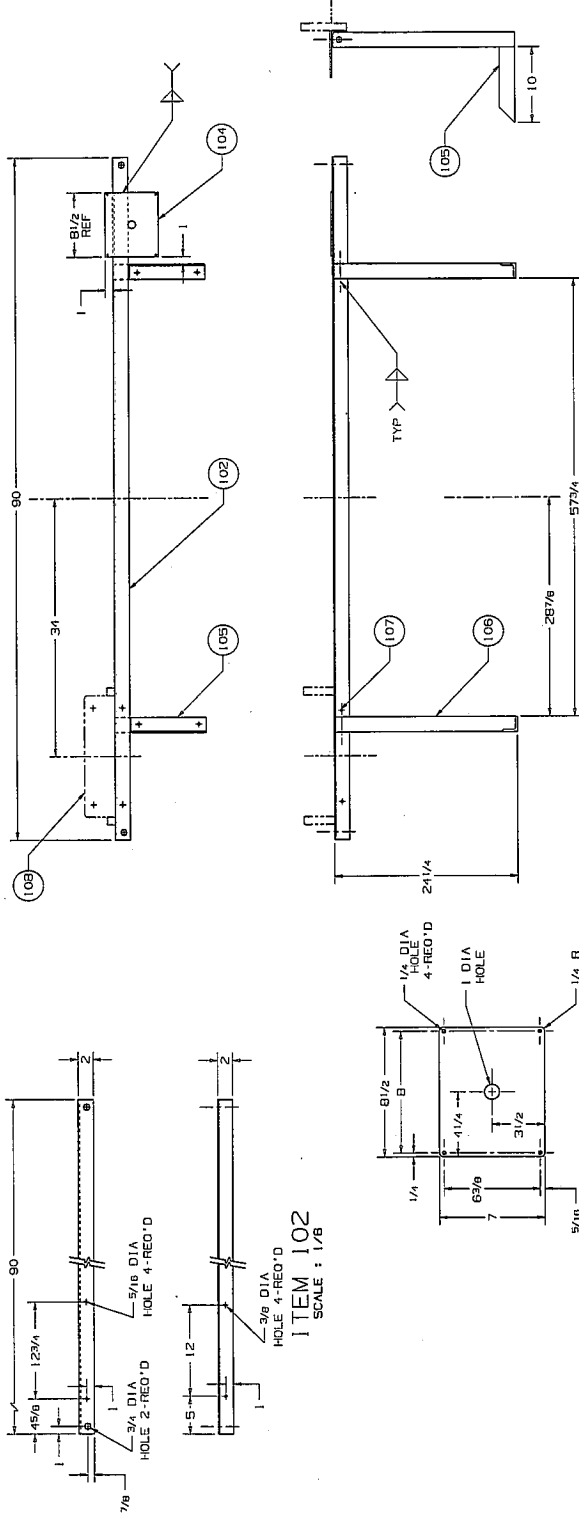
REV	DESCRIPTION	BY
1	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF EQUIPMENT PERSONNEL HOIST 35 FOOT FORD F550, 2008, FUSE BRACKET	
2	SCALE: 1" = 1'-0" DATE: 10-01-08 DRAWN: J. P. J. REVISED: 10-01-08	
3	PROJECT: J. P. J. REVISED: 10-01-08	
4	PROJECT: J. P. J. REVISED: 10-01-08	
5	PROJECT: J. P. J. REVISED: 10-01-08	
6	PROJECT: J. P. J. REVISED: 10-01-08	
7	PROJECT: J. P. J. REVISED: 10-01-08	
8	PROJECT: J. P. J. REVISED: 10-01-08	
9	PROJECT: J. P. J. REVISED: 10-01-08	
10	PROJECT: J. P. J. REVISED: 10-01-08	
11	PROJECT: J. P. J. REVISED: 10-01-08	
12	PROJECT: J. P. J. REVISED: 10-01-08	
13	PROJECT: J. P. J. REVISED: 10-01-08	
14	PROJECT: J. P. J. REVISED: 10-01-08	
15	PROJECT: J. P. J. REVISED: 10-01-08	
16	PROJECT: J. P. J. REVISED: 10-01-08	
17	PROJECT: J. P. J. REVISED: 10-01-08	
18	PROJECT: J. P. J. REVISED: 10-01-08	
19	PROJECT: J. P. J. REVISED: 10-01-08	
20	PROJECT: J. P. J. REVISED: 10-01-08	
21	PROJECT: J. P. J. REVISED: 10-01-08	
22	PROJECT: J. P. J. REVISED: 10-01-08	
23	PROJECT: J. P. J. REVISED: 10-01-08	
24	PROJECT: J. P. J. REVISED: 10-01-08	
25	PROJECT: J. P. J. REVISED: 10-01-08	
26	PROJECT: J. P. J. REVISED: 10-01-08	
27	PROJECT: J. P. J. REVISED: 10-01-08	
28	PROJECT: J. P. J. REVISED: 10-01-08	
29	PROJECT: J. P. J. REVISED: 10-01-08	
30	PROJECT: J. P. J. REVISED: 10-01-08	
31	PROJECT: J. P. J. REVISED: 10-01-08	
32	PROJECT: J. P. J. REVISED: 10-01-08	
33	PROJECT: J. P. J. REVISED: 10-01-08	
34	PROJECT: J. P. J. REVISED: 10-01-08	
35	PROJECT: J. P. J. REVISED: 10-01-08	
36	PROJECT: J. P. J. REVISED: 10-01-08	
37	PROJECT: J. P. J. REVISED: 10-01-08	
38	PROJECT: J. P. J. REVISED: 10-01-08	
39	PROJECT: J. P. J. REVISED: 10-01-08	
40	PROJECT: J. P. J. REVISED: 10-01-08	
41	PROJECT: J. P. J. REVISED: 10-01-08	
42	PROJECT: J. P. J. REVISED: 10-01-08	
43	PROJECT: J. P. J. REVISED: 10-01-08	
44	PROJECT: J. P. J. REVISED: 10-01-08	
45	PROJECT: J. P. J. REVISED: 10-01-08	
46	PROJECT: J. P. J. REVISED: 10-01-08	
47	PROJECT: J. P. J. REVISED: 10-01-08	
48	PROJECT: J. P. J. REVISED: 10-01-08	
49	PROJECT: J. P. J. REVISED: 10-01-08	
50	PROJECT: J. P. J. REVISED: 10-01-08	
51	PROJECT: J. P. J. REVISED: 10-01-08	
52	PROJECT: J. P. J. REVISED: 10-01-08	
53	PROJECT: J. P. J. REVISED: 10-01-08	
54	PROJECT: J. P. J. REVISED: 10-01-08	
55	PROJECT: J. P. J. REVISED: 10-01-08	
56	PROJECT: J. P. J. REVISED: 10-01-08	
57	PROJECT: J. P. J. REVISED: 10-01-08	
58	PROJECT: J. P. J. REVISED: 10-01-08	
59	PROJECT: J. P. J. REVISED: 10-01-08	
60	PROJECT: J. P. J. REVISED: 10-01-08	
61	PROJECT: J. P. J. REVISED: 10-01-08	
62	PROJECT: J. P. J. REVISED: 10-01-08	
63	PROJECT: J. P. J. REVISED: 10-01-08	
64	PROJECT: J. P. J. REVISED: 10-01-08	
65	PROJECT: J. P. J. REVISED: 10-01-08	
66	PROJECT: J. P. J. REVISED: 10-01-08	
67	PROJECT: J. P. J. REVISED: 10-01-08	
68	PROJECT: J. P. J. REVISED: 10-01-08	
69	PROJECT: J. P. J. REVISED: 10-01-08	
70	PROJECT: J. P. J. REVISED: 10-01-08	
71	PROJECT: J. P. J. REVISED: 10-01-08	
72	PROJECT: J. P. J. REVISED: 10-01-08	
73	PROJECT: J. P. J. REVISED: 10-01-08	
74	PROJECT: J. P. J. REVISED: 10-01-08	
75	PROJECT: J. P. J. REVISED: 10-01-08	
76	PROJECT: J. P. J. REVISED: 10-01-08	
77	PROJECT: J. P. J. REVISED: 10-01-08	
78	PROJECT: J. P. J. REVISED: 10-01-08	
79	PROJECT: J. P. J. REVISED: 10-01-08	
80	PROJECT: J. P. J. REVISED: 10-01-08	
81	PROJECT: J. P. J. REVISED: 10-01-08	
82	PROJECT: J. P. J. REVISED: 10-01-08	
83	PROJECT: J. P. J. REVISED: 10-01-08	
84	PROJECT: J. P. J. REVISED: 10-01-08	
85	PROJECT: J. P. J. REVISED: 10-01-08	
86	PROJECT: J. P. J. REVISED: 10-01-08	
87	PROJECT: J. P. J. REVISED: 10-01-08	
88	PROJECT: J. P. J. REVISED: 10-01-08	
89	PROJECT: J. P. J. REVISED: 10-01-08	
90	PROJECT: J. P. J. REVISED: 10-01-08	
91	PROJECT: J. P. J. REVISED: 10-01-08	
92	PROJECT: J. P. J. REVISED: 10-01-08	
93	PROJECT: J. P. J. REVISED: 10-01-08	
94	PROJECT: J. P. J. REVISED: 10-01-08	
95	PROJECT: J. P. J. REVISED: 10-01-08	
96	PROJECT: J. P. J. REVISED: 10-01-08	
97	PROJECT: J. P. J. REVISED: 10-01-08	
98	PROJECT: J. P. J. REVISED: 10-01-08	
99	PROJECT: J. P. J. REVISED: 10-01-08	
100	PROJECT: J. P. J. REVISED: 10-01-08	

BILL OF MATERIALS

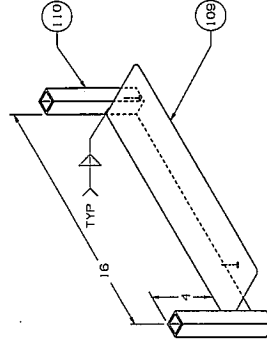
ITEM	QTY	DESCRIPTION
101	1	WLD'D ASSY CONSISTS OF 102 TO 106
102	1	2 x 2 x 3/16 x 90 LG STL ANGLE
103		
104	1	12 GA x 7 x 7/2 LG SHEET STEEL
105	2	2 x 2 x 1/8 x 10 LG STL ANGLE
106	2	2 x 2 x .120 x 24 LG STL 50 TUGING
107	2	9/16-16NC x 1 LG HEX HD BOLTS
108	1	W/LOC NUTS & WASHERS
109	1	WLD'D ASSY CONSISTS OF 109 AND 110
110	2	12 GA x 6 x 16 LG STL 50 TUGING
111	2	1 x 1 x .083 x 6 LG STL 50 TUGING

NOTES:

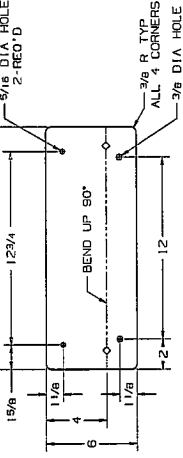
- ALL JOINTS TO BE WELDED CONTINUOUS UNLESS OTHERWISE SPECIFIED. SIZE OF ALL WELDS TO BE AT LEAST THE THICKNESS OF THE THINNER OF THE ADJACENT METALS.
- ALL WELDS TO BE ELECTRICALLY AND PAINT WILL BE IN ACCORDANCE WITH CALTRANS EQUIPMENT QUALITY STANDARDS. GO TO WWW.CALTRANS.EQUIPMENT.QUALITY STANDARDS.



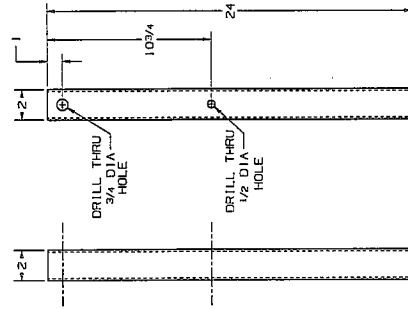
ITEM 101
SCALE: 1/8



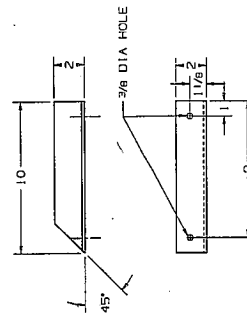
ITEM 108
SCALE: 1/8



ITEM 109
SCALE: 1/8



ITEM 106
SCALE: 1/4



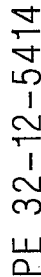
ITEM 105
RIGHT SIDE SHOWN
LEFT SIDE OPPOSITE
SCALE: 1/4

PE 32-12-5414

C	02/05	ADDED ITEM #104 LIGHT MOUNT	JDR
B	04/02	REMOVED ITEM #108 (ROTATOR)	JDR
A	02/01	ANTENNA HOLES FROM 13/16 DIA	JDR
REV		DESCRIPTION	BY
NEXT ASSEMBLY			
STATE OF CALIFORNIA			
DEPARTMENT OF TRANSPORTATION			
DIVISION OF EQUIPMENT			
1 TON PERSONNEL HOIST LIGHT RACK			
P2-0075-01			
SCALE AS NOTED DATE 12/20/00			
DRAWN BY JDR			
CHECKED BY JDR			
DESIGNED BY JDR			
REVISIONS			

ITEM	QTY	DESCRIPTION	MANUF. & NO.	CAL TRANS NO.
101	2	CIRCUIT BREAKER-150A SW/MAN RESET, 5 MT AUTOMATIC CHARGING RELAY, 120 AMP	BRIDGMAN EB-150 F-01 BLUE SEA 7810	030-4020
102	1	BATTERY SEPARATOR, SWMT CHARGE REGULATING SYSTEM	SAFARI V-100 1314	.
103	1	ANL FUSE, 250 AMP	RUSSMAN ANL 250 ANL	030-4865
104	1	ANL FUSE BLOCK	BLUE SEA 5005	030-4863
105	1	BATTERY, 12V, 210 AH AGM, 6P 4D	CONQUEST AGV-12210L	032-4794
106	1	INVERTER, 1800 W, 120V GFCI OUTLET, SINE WAVE	PROLINE PB-1800	030-4799
107	4 or 6	TERMINAL INSULATORS 2-2/0 GA, RED	SOLCO 52-2000-RED	OR OR
108	1	BATTERY TERMINAL CAP, 2/0 GA, BLACK	SWRC 52-219 P-X	OR OR
109	1	BATTERY TERMINAL CAP, 2/0 GA, RED	SWRC 52-219-RED	OR OR
110	2	BATTERY HOLD DOWN, FLUSH COVER, 10"	McMASTER 7764K6	.
111	AS REQ	SNAP IN LIQUID TIGHT GROMMET, 3/8"	HEYOZ 7777	.

1. ALL CABLES, ELECTRICAL AND MECHANICAL, IN AIRCRAFT SHALL BE EQUIPPED WITH PLUGS IN STANDARD OR UNIFORM TYPES OF CONNECTORS. PLUGS SHALL BE IDENTIFIED BY COLOR OR BY MARKING TO INDICATE THE CORRECT MATE.
2. ALL WIRE AND CABLE TO BE STORED AND SUPPORTED EVERY 18" BY INSULATED WIRE LUG CLAMPS.
3. PLASTIC TIE TIGHTENING SHALL NOT BE USED AS A MEANS FOR RETENTION OF WATERTIGHT CONNECTIONS. BANDING FOR RETENTION OF WATERTIGHT CONNECTIONS, ALL WATERTIGHT CONNECTIONS SHALL BE MADE BY THE FOLLOWING METHODS:
 - a. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
 - b. BY THE USE OF A WATERTIGHT GROMMET.
 - c. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
4. ALL WATERTIGHT CONNECTIONS SHALL BE MADE BY THE FOLLOWING METHODS:
 - a. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
 - b. BY THE USE OF A WATERTIGHT GROMMET.
 - c. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
5. CABLES WIRELESS SHALL BE IDENTIFIED BY THE FOLLOWING METHODS:
 - a. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
 - b. BY THE USE OF A WATERTIGHT GROMMET.
 - c. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
6. ALL EXTERIOR OF THE CAB EXPOSED ELECTRICAL, WIRELESS ELECTRICAL, AND/OR MECHANICAL EQUIPMENT SHALL BE IDENTIFIED BY THE FOLLOWING METHODS:
 - a. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
 - b. BY THE USE OF A WATERTIGHT GROMMET.
 - c. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
7. ALL EXTERIOR OF THE CAB EXPOSED ELECTRICAL, WIRELESS ELECTRICAL, AND/OR MECHANICAL EQUIPMENT SHALL BE IDENTIFIED BY THE FOLLOWING METHODS:
 - a. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
 - b. BY THE USE OF A WATERTIGHT GROMMET.
 - c. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
8. ALL EXTERIOR OF THE CAB EXPOSED ELECTRICAL, WIRELESS ELECTRICAL, AND/OR MECHANICAL EQUIPMENT SHALL BE IDENTIFIED BY THE FOLLOWING METHODS:
 - a. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
 - b. BY THE USE OF A WATERTIGHT GROMMET.
 - c. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
9. ALL EXTERIOR OF THE CAB EXPOSED ELECTRICAL, WIRELESS ELECTRICAL, AND/OR MECHANICAL EQUIPMENT SHALL BE IDENTIFIED BY THE FOLLOWING METHODS:
 - a. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
 - b. BY THE USE OF A WATERTIGHT GROMMET.
 - c. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
10. ALL EXTERIOR OF THE CAB EXPOSED ELECTRICAL, WIRELESS ELECTRICAL, AND/OR MECHANICAL EQUIPMENT SHALL BE IDENTIFIED BY THE FOLLOWING METHODS:
 - a. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
 - b. BY THE USE OF A WATERTIGHT GROMMET.
 - c. BY THE USE OF A WATERTIGHT PLUG OR GROMMET, TAMPED TOSEAL.
11. ALL WIRE ROUTING SHALL NOT BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT.
12. ALL WIRE ROUTING SHALL NOT BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT.
13. ALL WIRE ROUTING SHALL NOT BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT.
14. ALL WIRE ROUTING SHALL NOT BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT.
15. ALL WIRE ROUTING SHALL NOT BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT. ALL WIRE ROUTING SHALL BE PLACED UNDER OR OVER ANY PART OF THE AIRCRAFT.



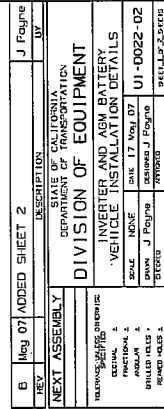
B	day of	ADDED BATTERY CABLE EQUIPMENT LIST A & B, ADDED SHEET 2	J Payne
A	02/07	QUANITY ITEM # 1014 - ASPT ON 5TH COS.	JRP/KMS
REV		FOR TIE INS FOR 8' SECTION	BY
NEXT ASSEMBLY			
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION			
DIVISION OF EQUIPMENT			
ONE 4D AGM BATTERY, SCHEMATIC			
NAME		DATE	17 Nov 07
DRAWN J Payton		APPROVED	
CHECKED		J Payton	U1-00022-01
		SUPERVISOR	WILLIAM L. JEFFERS

BATTERY CABLE REQUIREMENTS A		INVERTER CABLE REQUIREMENTS B	
AMP RATING	LENGTH IN FT.	MANUF. PART NO. OR TYPE	MANUF. PART NO. OR TYPE
30/0	30'	10' 1/2"	10' 1/2"
		INVERTER CABLE, 500	AUTOCABLE STARTER, 500
		BATT. CABLE, 500	BATT. CABLE, 500
25'	25'	10' 1/2"	10' 1/2"
		INVERTER CABLE, 500	AUTOCABLE STARTER, 500
20'	20'	10' 1/2"	10' 1/2"
		INVERTER CABLE, 500	AUTOCABLE STARTER, 500
15'	15'	10' 1/2"	10' 1/2"
		INVERTER CABLE, 500	AUTOCABLE STARTER, 500
10'	10'	10' 1/2"	10' 1/2"
		INVERTER CABLE, 500	AUTOCABLE STARTER, 500
5'	5'	10' 1/2"	10' 1/2"
		INVERTER CABLE, 500	AUTOCABLE STARTER, 500

[illegible]

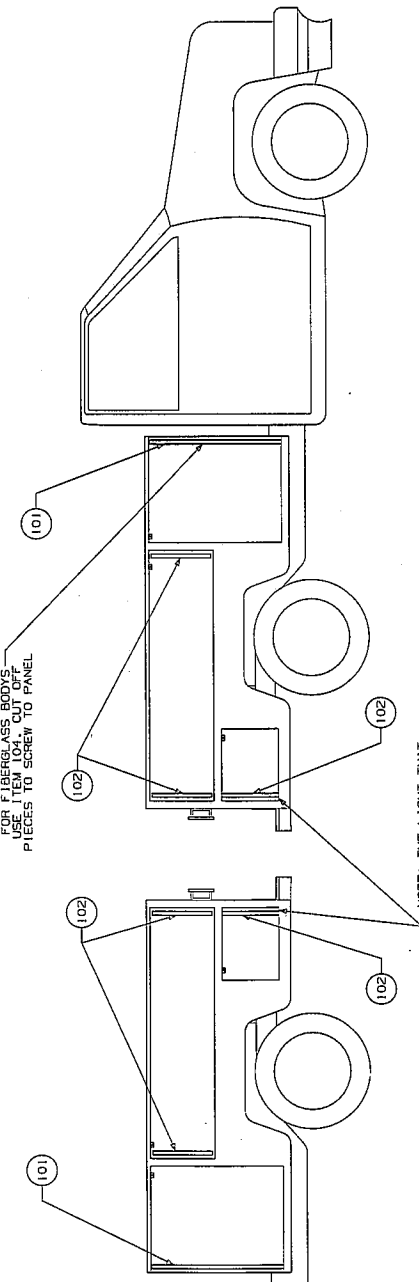
ITEM	QTY	DESCRIPTION	MANUF. & NO.	CAL TRANS NO.
201	1	10 GA HR STEEL SHEET ASTM A569	.	.

2. ALL WIRE AND CABLE TO BE SECURED AND INSULATED EVERY 18" BY INSTALLED METAL LOOP CLAMPS.
3. PLASTIC TIE WRAPS SHALL NOT BE USED AS A MEANS OF SUPPORT OR RETENTION OF WIRE OR CABLE. BUNDLING OR RETENTION OF WIRE OR CABLE CONDUCTORS.
4. ALL BATTERY CABLE CONNECTIONS SHALL BE CORRECTLY PLATED, CRIMPED OR SOLDER. CRAMP1528xxxx-2 or MOLEXT18221-01xxxx)
5. RING TERMINALS AND BUTT SPICES FOR 22 TO 10 GAUGE WIRES, SHALL BE SOLDERLESS INSULATED CRIMPED TERMINALS DOUGLASS WIRING TOOLING, RED, BLUE, YELLOW, RATED TO 220° F. (AMP/PIG/08 MOLEX/AVI/KRIMP) SHALL BE USED FOR THE CAB SPICES. LINED HEAVY DUTY RING LUGS SHALL BE ADHESIVE LINED HEAVY SINKING TUBING.
6. ALL EXTERIOR OF THE CAB EXPOSED ELECTRICAL TERMINAL STUDS OR SCREWS SHALL BE COATED WITH LIQUID ELECTRICAL TAPE (STAR BRITEL) OR EQUIVALENT. ALL ELECTRICAL WIRING AND SOCKETS SHALL BE COVERED WITH NYLON COMPOUND TRUCK LITTER TO SEAL OUT MOISTURE.
7. ALL NYLON INSULATED AND UNINSULATED CRIMPS SHALL BE DONE WITH A RATCHETING TYPE CRIMP TOOL WITH THE CORRECT DIES FOR THE TERMINALS BEING CRIMPED.
8. HEAVY DUTY RING LUGS SHALL BE CRIMPED WITH A HEAVY DUTY RING LUGS LEVER STYLE, DIE TYPE TOOL, OR SOLDERED.
9. ALL NON INSULATED CRIMP/SOLDER TERMINALS OUTSIDE OF THE CAB SHALL BE SEALED WITH ADHESIVE LINED HEAVY SINKING TUBING.
10. EACH POSITIVE BATTERY TERMINAL OR STUD/BOLT WITH ALL POSITIVE TERMINALS.
11. ALL WIRE ROUTING SHALL NOT BE PLACED UNDER TENSION AND SHALL BE FREE AND CLEAR OF ANY MOVING PARTS AND HEAT SOURCES. NYLON SPLIT LOOM SHALL BE USED TO PROVIDE PROTECTION FROM ROAD DAMAGE. WHENEVER WIRES ARE RUN THRU HOLES IN METAL PARTITIONS THE HOLES SHALL BE DEBURRED & EQUIPPED WITH SUITABLE MECHANICAL PROTECTION GRADIENTS.
12. ALL ADDED UNDER HOOD AND UNDER BODY WIRING MUST BE IN NON-INSULATED WIRE, HIGH TEMPERATURE, UNINSULATED WIRE.
13. FOLLOW MANUFACTURES INSTALLATION INSTRUCTIONS.
14. DO NOT INSTALL EQUIPMENT IN THE AIRBAG DEPLOYMENT ZONE.
15. ALL CABLE AND HARNESS ASSEMBLIES TO BE DONE PER: 157-18000-1-820

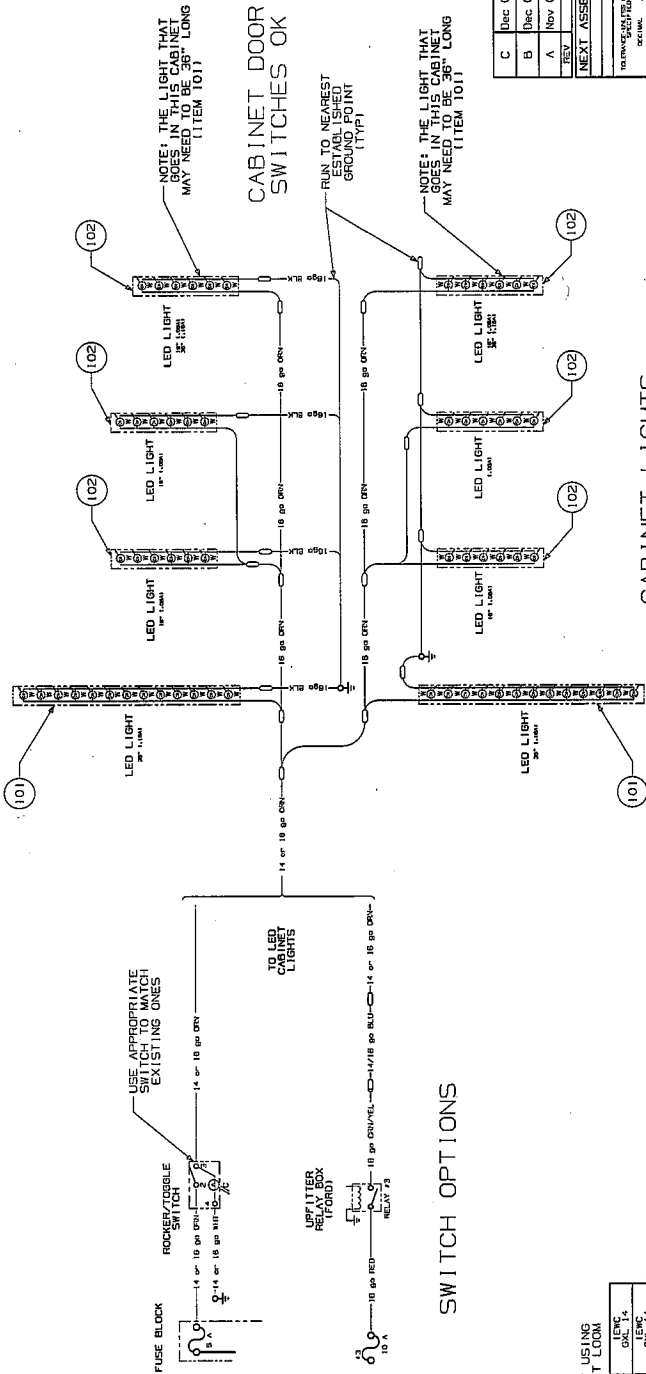


BILL OF MATERIALS

ITEM	QTY	DESCRIPTION	MANUF. & NO.	CALTRANS NO.
101	2 or 4	LIGHT, 3mm WHITE LED 1/2 APART, 36" L2V0C	VISTA MANUF	
102	6 or 4	LIGHT, 3mm WHITE LED 1/2 APART, 10" L2V0C	UL-1.5 3H-LE-36" LONG	
103			UL-1.5 3H-LE-10" LONG	
104	AS REQ.	ANGLE MOUNTING CLIP 1" LG. CUT AS REQ.	VISTA MANUF	
105			UL-1.5 3H-LE-36" LONG	



LIGHTS ARE SHOWN IN APPROXIMATE POSITION. MOUNT ON HINGE SIDE WITH PROVIDED BRACKETS. LIGHTS ARE DIRECTIONAL MAKE SURE THEY ARE POINTING INTO CABINET.



CABINET LIGHTS

PE 32-12-5414

C	Dec 08	REMOVED DOOR SWITCHES ITEM 105	J Payne
B	Dec 08	UPPITER RELAY 13 WIRE COLOR WAS 18 OR DRW/20 J Payne	
A	Nov 08	ADDED NOTE ABOUT 36" LAMP IN LAST CABINET J Payne	
		REMOVED ITEM 102. ITEM 104 WAS LG.	
REV		DESCRIPTION	BY
1		REMOVED DOOR SWITCHES	BY
2		REMOVED DOOR SWITCHES	BY
3		REMOVED DOOR SWITCHES	BY
4		REMOVED DOOR SWITCHES	BY
5		REMOVED DOOR SWITCHES	BY
6		REMOVED DOOR SWITCHES	BY
7		REMOVED DOOR SWITCHES	BY
8		REMOVED DOOR SWITCHES	BY
9		REMOVED DOOR SWITCHES	BY
10		REMOVED DOOR SWITCHES	BY
11		REMOVED DOOR SWITCHES	BY
12		REMOVED DOOR SWITCHES	BY
13		REMOVED DOOR SWITCHES	BY
14		REMOVED DOOR SWITCHES	BY
15		REMOVED DOOR SWITCHES	BY
16		REMOVED DOOR SWITCHES	BY
17		REMOVED DOOR SWITCHES	BY
18		REMOVED DOOR SWITCHES	BY
19		REMOVED DOOR SWITCHES	BY
20		REMOVED DOOR SWITCHES	BY
21		REMOVED DOOR SWITCHES	BY
22		REMOVED DOOR SWITCHES	BY
23		REMOVED DOOR SWITCHES	BY
24		REMOVED DOOR SWITCHES	BY
25		REMOVED DOOR SWITCHES	BY
26		REMOVED DOOR SWITCHES	BY
27		REMOVED DOOR SWITCHES	BY
28		REMOVED DOOR SWITCHES	BY
29		REMOVED DOOR SWITCHES	BY
30		REMOVED DOOR SWITCHES	BY
31		REMOVED DOOR SWITCHES	BY
32		REMOVED DOOR SWITCHES	BY
33		REMOVED DOOR SWITCHES	BY
34		REMOVED DOOR SWITCHES	BY
35		REMOVED DOOR SWITCHES	BY
36		REMOVED DOOR SWITCHES	BY
37		REMOVED DOOR SWITCHES	BY
38		REMOVED DOOR SWITCHES	BY
39		REMOVED DOOR SWITCHES	BY
40		REMOVED DOOR SWITCHES	BY
41		REMOVED DOOR SWITCHES	BY
42		REMOVED DOOR SWITCHES	BY
43		REMOVED DOOR SWITCHES	BY
44		REMOVED DOOR SWITCHES	BY
45		REMOVED DOOR SWITCHES	BY
46		REMOVED DOOR SWITCHES	BY
47		REMOVED DOOR SWITCHES	BY
48		REMOVED DOOR SWITCHES	BY
49		REMOVED DOOR SWITCHES	BY
50		REMOVED DOOR SWITCHES	BY
51		REMOVED DOOR SWITCHES	BY
52		REMOVED DOOR SWITCHES	BY
53		REMOVED DOOR SWITCHES	BY
54		REMOVED DOOR SWITCHES	BY
55		REMOVED DOOR SWITCHES	BY
56		REMOVED DOOR SWITCHES	BY
57		REMOVED DOOR SWITCHES	BY
58		REMOVED DOOR SWITCHES	BY
59		REMOVED DOOR SWITCHES	BY
60		REMOVED DOOR SWITCHES	BY
61		REMOVED DOOR SWITCHES	BY
62		REMOVED DOOR SWITCHES	BY
63		REMOVED DOOR SWITCHES	BY
64		REMOVED DOOR SWITCHES	BY
65		REMOVED DOOR SWITCHES	BY
66		REMOVED DOOR SWITCHES	BY
67		REMOVED DOOR SWITCHES	BY
68		REMOVED DOOR SWITCHES	BY
69		REMOVED DOOR SWITCHES	BY
70		REMOVED DOOR SWITCHES	BY
71		REMOVED DOOR SWITCHES	BY
72		REMOVED DOOR SWITCHES	BY
73		REMOVED DOOR SWITCHES	BY
74		REMOVED DOOR SWITCHES	BY
75		REMOVED DOOR SWITCHES	BY
76		REMOVED DOOR SWITCHES	BY
77		REMOVED DOOR SWITCHES	BY
78		REMOVED DOOR SWITCHES	BY
79		REMOVED DOOR SWITCHES	BY
80		REMOVED DOOR SWITCHES	BY
81		REMOVED DOOR SWITCHES	BY
82		REMOVED DOOR SWITCHES	BY
83		REMOVED DOOR SWITCHES	BY
84		REMOVED DOOR SWITCHES	BY
85		REMOVED DOOR SWITCHES	BY
86		REMOVED DOOR SWITCHES	BY
87		REMOVED DOOR SWITCHES	BY
88		REMOVED DOOR SWITCHES	BY
89		REMOVED DOOR SWITCHES	BY
90		REMOVED DOOR SWITCHES	BY
91		REMOVED DOOR SWITCHES	BY
92		REMOVED DOOR SWITCHES	BY
93		REMOVED DOOR SWITCHES	BY
94		REMOVED DOOR SWITCHES	BY
95		REMOVED DOOR SWITCHES	BY
96		REMOVED DOOR SWITCHES	BY
97		REMOVED DOOR SWITCHES	BY
98		REMOVED DOOR SWITCHES	BY
99		REMOVED DOOR SWITCHES	BY
100		REMOVED DOOR SWITCHES	BY

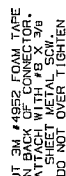
IT IS OK TO MAKE JACKETED CABLE BY USING SINGLE WIRES RAN INSIDE NYLON SPLIT LOOM

SIZE	WIRE	TYPE	WIRE	TYPE	WIRE	TYPE	WIRE	TYPE	WIRE	TYPE
14	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
16	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
18	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
20	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
22	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
24	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
26	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
28	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
30	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
32	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
34	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
36	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
38	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
40	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
42	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
44	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
46	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
48	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
50	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
52	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
54	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
56	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
58	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
60	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
62	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
64	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
66	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
68	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
70	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
72	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
74	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
76	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
78	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
80	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
82	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
84	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
86	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
88	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
90	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
92	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
94	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
96	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
98	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK
100	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK	1	GRN. BLK

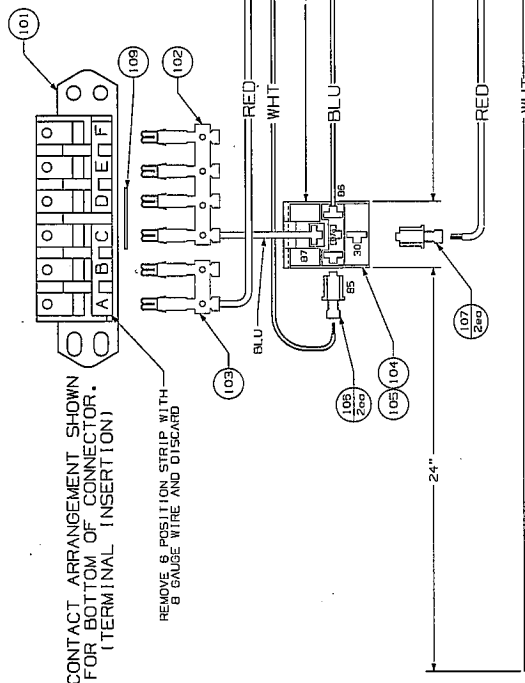
WIRE REQUIREMENT LIST DC

WIRE HARNESS					
WIRE NO.	SIZE AWG	COLOR	LENGTH	FROM	TO
1	10	WHT	168	FUSE BLK	FREE END
2	10	RED	144	RELAY CONN 30	FREE END
3	10	BLU	214	RELAY CONN 197	TERM STRIP 4 WAY G.
3	10	RED	144	TERM STRIP 2 WAY A.	FREE END
5	16	BLU	48	RELAY CONN 6B	FREE END
6	16	WHT	48	RELAY CONN 55	FREE END

WIRE NO.	SIZE AWG.	COLOR	LENGTH	FROM	TO	REMARKS
1	10	WHT	168	FUSE BLK	FREE END	.
2	10	RED	144	RELAY CONN 30	FREE END	.
3	10	BLU	214	RELAY CONN 17	TERM STRIP 4 WAY C.	.
3	10	RED	144	TERM STRIP 2 WAY A.	FREE END	.
5	16	BLU	48	RELAY CONN 16B	FREE END	.
6	16	WHT	48	RELAY CONN 15B	FREE END	.

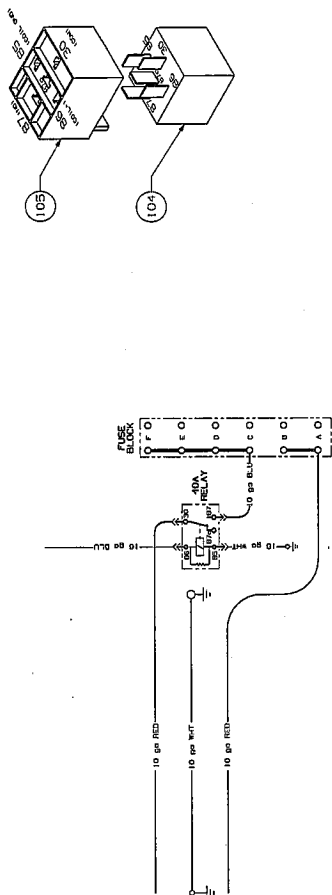


CAP MODIFICATION



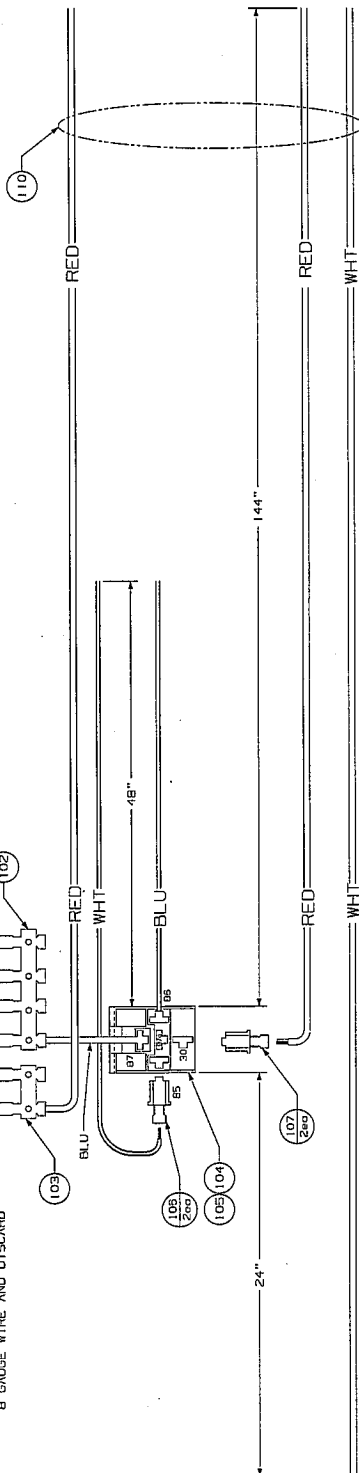
CONTACT ARRANGEMENT SHOWN
FOR BOTTOM OF CONNECTOR.
(TERMINAL INSERTION)

REMOVE 6 POSITION STRIP WITH—
8 GAUGE WIRE AND DISCARD



NOTCH OUT CAP, ONE SIDE ONLY
TO FIT AROUND RELAY CONNECTOR

CAP MODIFICATION



PE 32-12-5414

ITEM	QTY	DESCRIPTION	MANUF. / DNG NO.	CT NO.
101	1	FUSE BLOCK, 6 POS, 8 BAR WIRE	PELL CITY 739B7	030-3982
102	1	FEMALE TERM PACK CON 111 10-12 GOS, 005 BAR 4 WAY	PELL CITY 739B7	
103	1	FEMALE TERM PACK CON 111 10-12 GOS, 005 BAR 2 WAY	PELL CITY 739B7	
104	1	RELAY 14-16 GOS, 120 P FEMALE TERMINAL 630	PELL CITY 739B7	030-4915
105	1	MINI RELAY CONSTR METRI-PACK 630 5F	PELL CITY 739B7	030-4937
106	2	FEMALE TERMINAL 630 RELAY 14-16 GOS, 120 P	PELL CITY 739B7	
107	2	FEMALE TERMINAL 630 RELAY 10 GOS, 120 P	PELL CITY 739B7	
108	1	1/8 X 3/8 SHEET METAL FEMALE TERMINAL 630	PELL CITY 739B7	CR
109	1	CON, 0.045 IN, 3X 13.16 IN FEMALE TERMINAL 630	PELL CITY 739B7	EQV14
110	108*	SPLIT CONVOLUTED LOOM, 1/2" TERMINAL	MCMASTER 9010UN152	EQV14
			482	EQV14
			MCMASTER 2588K4	EQV14

NOTES:

- [illegible]

A	Item 00	REGIO OPERANTIC VIEW	J	Page 01
REV	TEXT	DESCRIPTION		
NEXT ASSEMBLY				
X				
DIVISION OF EQUIPMENT				
DEPARTMENT OF TRANSPORTATION				
TRANSPORTATION DIVISION				
1	POSITION	DATE OR Aug 07	UI	0034-01
2	MAAF	J	Page 01	
3	REGIO	Page 01		
4	SHALLS PILES			
5	REGIO			
6	FUNCTIONAL			
7	REGIO			
8	SHALLS PILES			
9	REGIO			
10	FUNCTIONAL			
11	REGIO			
12	SHALLS PILES			
13	REGIO			
14	FUNCTIONAL			
15	REGIO			
16	SHALLS PILES			
17	REGIO			
18	FUNCTIONAL			
19	REGIO			
20	SHALLS PILES			
21	REGIO			
22	FUNCTIONAL			
23	REGIO			
24	SHALLS PILES			
25	REGIO			
26	FUNCTIONAL			
27	REGIO			
28	SHALLS PILES			
29	REGIO			
30	FUNCTIONAL			
31	REGIO			
32	SHALLS PILES			
33	REGIO			
34	FUNCTIONAL			
35	REGIO			
36	SHALLS PILES			
37	REGIO			
38	FUNCTIONAL			
39	REGIO			
40	SHALLS PILES			
41	REGIO			
42	FUNCTIONAL			
43	REGIO			
44	SHALLS PILES			
45	REGIO			
46	FUNCTIONAL			
47	REGIO			
48	SHALLS PILES			
49	REGIO			
50	FUNCTIONAL			
51	REGIO			
52	SHALLS PILES			
53	REGIO			
54	FUNCTIONAL			
55	REGIO			
56	SHALLS PILES			
57	REGIO			
58	FUNCTIONAL			
59	REGIO			
60	SHALLS PILES			
61	REGIO			
62	FUNCTIONAL			
63	REGIO			
64	SHALLS PILES			
65	REGIO			
66	FUNCTIONAL			
67	REGIO			
68	SHALLS PILES			
69	REGIO			
70	FUNCTIONAL			
71	REGIO			
72	SHALLS PILES			
73	REGIO			
74	FUNCTIONAL			
75	REGIO			
76	SHALLS PILES			
77	REGIO			
78	FUNCTIONAL			
79	REGIO			
80	SHALLS PILES			
81	REGIO			
82	FUNCTIONAL			
83	REGIO			
84	SHALLS PILES			
85	REGIO			
86	FUNCTIONAL			
87	REGIO			
88	SHALLS PILES			
89	REGIO			
90	FUNCTIONAL			
91	REGIO			
92	SHALLS PILES			
93	REGIO			
94	FUNCTIONAL			
95	REGIO			
96	SHALLS PILES			
97	REGIO			
98	FUNCTIONAL			
99	REGIO			
100	SHALLS PILES			